



3611

PATENT 717901.16
EL493160887US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: William Plenderleith)
U. S. Patent Application Serial Number: 09/989,351) Examiner: Unknown.
U.S. Filing Date: November 20, 2001) Group Art Unit: 3618
PCT No.: PCT/GB00/01926)
International Filing Date: May 22, 2000)
Priority Data: May 22, 1999)
(U.K. Patent No. 9911843.2))
For: SPORTS VEHICLE)
Attorney Docket: 717901.16)

Assistant Commissioner for Patents
Washington, D.C. 20231
Attn: BOX DAC

RECEIVED
FEB 27 2002
GROUP 3600

PETITION FOR CORRECTION OF NATIONAL PHASE FILING
STATUS FOR A PATENT APPLICATION UNDER 37 C.F.R. SECTION 1.182

INTRODUCTION:

Applicant respectfully petitions for correction to provide U.S. national phase application filing status for the Applicant's patent application (United States Patent Application Serial Number 09/989,351) based on the January 16, 2002 decision of Special Examiner Harry Kim, who works at the PCT Branch of the United States Patent Office.

STATEMENT OF FACTS:

Upon failure to receive a Notice of Acceptance under 35 U.S.C. Section 371 and 37 C.F.R. Section 1.494 or 1.495, Applicant's Attorney, on January 11, 2002 contacted the United States Patent Office to ascertain why this Document was not received. Applicant was directed to

02/06/2002 AMENDMENT 0010053 110160 09059351

Examiner Rosenberg, who is in charge of this Patent Application. Upon Examiner Rosenberg's review of the above listed Patent Application and associated file, Examiner Rosenberg informed Applicant's Attorney that she had sent the patent application to the PCT Branch of the United States Patent Office since it would appear to be a PCT case. Upon receipt of the file in the PCT Branch of the United States Patent Office, Special Examiner Harry Kim on January 17, 2002, called to inform Applicant's Attorney that the above listed patent application was a bypass continuation patent application and not a PCT national phase patent application. Also, Special Examiner Kim explained that these two alternatives were the only possible alternatives due to the fact that this preliminary amendment was not an original patent application and there were no prior co-pending U.S. patent applications.

Applicant is hereby appealing this decision of Special Examiner Kim. Applicant's submission was a preliminary amendment that, in the identifying heading on the front page was specifically **addressed to Box PCT at the United States Designated/Elected Office (DO/EO/US)**. The prior application number along with the examiner and group art unit is listed as "unknown." The PCT Number was listed as PCT/GB00/01926 and the International Filing Date was listed as May 22, 2000. A priority date of May 22, 1999 for a Great Britain Patent is listed. **No priority claim was made to the PCT application** and the one (1) year period for claiming priority under the Paris Convention and 35 U.S.C. Section 119 **expired on May 22, 2000** for this Great Britain Patent.

A standard patent application transmittal was inadvertently utilized. However, this transmittal requires "**requisite information**" involving prior applications if Applicant's Patent Application was to be a continuation application and no such information was provided.

POINTS TO BE REVIEWED:

1. When all items required under 35 U.S.C. 371 and 37 C.F.R. Sections 1.494 or 1.495 have been provided within the requisite time period, should the Applicant be unjustly deprived of national phase filing status based on a mere clerical error in utilizing a pre-printed form that merely operated to provide a listing of documents that were mailed together?

2. When there are only two possible types of patent applications that could have been filed, i.e., a bypass continuation application based on a PCT application and a national phase application based on a PCT application and there is only two possible places to receive an indication as to the status of this patent application, i.e., the transmittal document and the identifying heading on the preliminary amendment and both documents clearly negate the possibility of a bypass continuation application, should a bypass continuation application status be conveyed upon the Applicant's Patent Application when it is clearly contrary to the Applicant's intent and the Applicant has not provided the continuation data that is specifically mandated by the United States Patent Office?

3. Should the Applicant, who has filed a complete patent specification with appropriate payment within the requisite time period that fully comports with 35 U.S.C. Section 371, be completely barred from obtaining U.S. national phase filing status based on a mere clerical error, that only involves use of a pre-printed transmittal document, when the United States Patent Office allows for virtually every other type of error correction by petition (extendable to five (5) months under 37 C.F.R. Section 1.53(c)) including the filing of missing pages of a patent specification or figures to the drawings, where the Applicant is able to obtain the same initial filing date as a submission of a completely deficient patent application?

4. There is a pre-printed form for revival of an abandoned PCT National Phase Patent Application, which is attached as Appendix A. This allows people to obtain a national phase patent application when they do not file the patent application or pay the fee within the requisite time period with a mere statement that the delay was unintentional. It is respectfully believed that the Applicant, who has filed a complete patent application, without delay, and with an appropriate fee authorization should not be prohibited from obtaining a U.S. National phase patent application. If Applicant utilizes this petition to revive, then there will two patent applications with identical subject matter, which is directly prohibited under 35 U.S.C. Sections 121 and 101. Therefore, should an applicant who is completely dilatory in filing a national phase patent application have a superior ability to rectify the situation over an applicant who has filed a complete patent application within the requisite time period with a complete payment authorization?

5. Should the Applicant, because of his status as a foreign citizen, suffer an undue hardship and prejudice due to the loss of PCT national phase status? The Applicant will be required to provide a certified copy of the United Kingdom Patent No. 9911843.2 which is very prejudicial against this foreign individual since a similar requirement is not required for a PCT national phase application since the certified copy of the U.K. Patent has already been filed. Also, it is not required of U.S. citizens regarding co-pending U.S. patent applications. There is also a separate PCT definition for unity of invention that is also more liberal than that found under United States Regulations so that by proceeding under U.S. Regulations will also pose a severe detrimental hardship to this Foreign Applicant.

ACTION REQUESTED:

Conversion of U.S. Application Patent Serial No. 09/989,351 to a U.S. national phase patent application of International Patent Application No. PCT/GB00/01926 is respectfully requested.

DISCUSSION:

Applicant filed the enclosed the Preliminary Amendment, which is hereby attached as Appendix B, which operates as a substitute specification and under 37 C.F.R. Section 1.125 can be filed at any time in U.S. national phase applications up to the point of issuance. This preliminary amendment is **specifically addressed to Box PCT, United States Designated/Elected Office (DO/EO/US)**. Box PCT, under Official Gazette Notices dated February 5, 2002 is “only for mail related to applications filed under the Patent Cooperation Treaty” as shown in Appendix C. A bypass continuation patent application is not a PCT application but merely a U.S. patent application that claims priority to an International PCT Application. Therefore, since this was not a new international patent application, the only possible patent application that could have been filed based on this preliminary amendment was a PCT national phase patent application. It is respectfully believed that no bypass continuation patent applications have ever been filed at Box PCT, United States Designated/ Elected Office (DO/EO/US). The heading identification material also makes it clear that it is a PCT case that claims priority of a patent from Great Britain that was filed on May 22, 1999. This was the **only reference to priority**.

Under 35 U.S.C. Section 119, as well as the Paris Convention, there is only a **twelve (12) month priority period** for a foreign patent application. This time period had **expired on May 22, 2000**. Therefore, this claim to priority is totally meaningless if this is a bypass continuation patent application. The only way this priority claim makes any sense whatsoever is by referring to the listed International Patent Application No. PCT/GB00/01926 that was filed on May 22, 2000 to ascertain the only real possibility, which is that this is a U.S. national phase patent application. Therefore, it is respectfully believed that a review of the heading identification material on the preliminary amendment that was addressed to Box PCT at the United States Designated/ Elected Office (DO/EO/US) and the claim of priority to a patent application that was filed more than twelve (12) months ago would demonstrate that there is no ambiguity, but only one possible conclusion, which is that this U.S. Patent Application Serial No. 09/989,351 is a U.S. national phase patent application.

The transmittal document, attached as Appendix D, is merely the standard transmittal prescribed by the United States Patent Office that lists the attached documents and includes a fee sheet that allows payment of any additional fees. The use of this transmittal was a mere inadvertent clerical error. The fee sheet provides for payment of any additional fees to fully comport with 35 U.S.C. Section 371, 37 C.F.R. Section 1.494 and 37 C.F.R. Section 1.495. This transmittal document requires, in **Section 18**, that: "**If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 C.F.R. Section 1.76.**" (emphasis added). The box for a continuing application was specifically not checked and continuing application data was specifically not provided. This data was deemed **required**, which is defined in *The New Lexicon Webster's Dictionary*, p. 846 (1987), herein attached as Appendix E, as: "stipulated or demanded" "Stipulation" is defined as: "---a condition for reaching agreement." *Id.* At 975, herein attached as Appendix F. Therefore, the absence of this necessary material makes it clear that a bypass continuation was not desired nor wanted. It is respectfully believed that Applicant should not obtain a bypass continuation when the necessary and requisite material mandated by the transmittal was not provided. Therefore, by not providing this material makes it very clear that it was a U.S. national phase patent application that was filed and not a bypass continuation patent application.

Therefore, both documents either viewed alone or together, on their face, eliminate all possible ambiguity and make it clear that a U.S. National Phase Patent Application was intended and any possible intent to file a bypass continuation application was clearly negated. In other words, no bypass continuation applications are filed at Box PCT/ United States Designated/ Elected Office (DO/EO/US) and the **required** information regarding continuation data was not provided on the transmittal document.

Although the United States Patent Office has a special form for the transmittal of fees and documents for entering the U.S. national phase, the PCT Applicant's Guide – Volume II – Page 7, attached herein as Appendix G, specifically states that this “---form should preferably (**but need not**) be used.” (US.03, emphasis added). Therefore, the inadvertent use of the wrong transmittal document should not preclude Applicant from obtaining national phase patent application status.

The United States Patent Office provides correction of virtually every type of error and irregularity. This includes correction of inventorship, correction of a filing date, and so forth. The United States Patent Office even allows for filing of missing pages of a patent application and missing drawings at a later date, while providing the Applicant with the filing date of the few papers that were initially filed. This can be extended up to five months under 37 C.F.R. Section 1.53(c). In the alternative, the correct transmittal form for this patent application is hereby submitted as Appendix H. This is only one pre-printed form and should have much less significance than any page missing from a patent application. Applicant respectfully requests comparable treatment and consistency in U.S. Patent Office practice. The Commissioner is authorized to charge any additional fees needed to correct this error to the Applicant's Deposit Account No. 11-0160.

In addition, one of the five pre-printed forms that is available for an Applicant from the United States Patent Office for entering the U.S. national phase is a Petition for Revival of an International Application for Patent Designating the U.S. Abandoned Unintentionally under 37 C.F.R. Section 1.137(b), hereby enclosed as Appendix A. This allows an Applicant to have a U.S. national phase patent application even when the time limits were totally ignored and absolutely nothing is filed within the requisite time period. In this case, a full and complete patent application was filed with appropriate payment (fee and fee authorization) within the requisite time period that fully comports with 35 U.S.C. Section 371(c). Therefore, even if the

Applicant files a petition of this nature and the petition is granted, then Applicant will have two pending patent applications that are absolutely identical. Under 35 U.S.C. Sections 101 and 121, this is absolutely and totally **prohibited** by the United States Patent Office and the Courts as **double patenting**.

It is respectfully believed that there is no logical reason to allow an applicant, who is absolutely dilatory and does not file anything within the requisite time period set forth by the Patent Cooperation Treaty, to be able file a petition with a statement that the entire delay was unintentional and easily obtain a U.S. national phase patent application but an applicant who fully complies with all aspects of 35 U.S.C. Section 371(c) by filing a complete patent application with an appropriate payment (fee and fee authorization) within the requisite time period is completely barred from obtaining national phase status, due to an erroneous transmittal document. It is respectfully believed that this is particularly unreasonable when both the submitted transmittal document and the heading identification material from the preliminary amendment absolutely dictate a national phase patent application and not a bypass continuation patent application. It is respectfully believed that the administration of the laws related to patents by the United States Patent Office is fair and evenhanded. In view of this, since an applicant who is totally dilatory can obtain a U.S. national phase application then an applicant who fully complies with 35 U.S.C. Section 371(c) is most certainly entitled to a national phase patent application especially in view of a clear and unequivocal expression of this intent.

This Applicant is a foreign citizen, so that loss of U.S. national phase status will require a certified copy of the United Kingdom Patent No. 9911843.2, which operates as an extreme hardship and is very prejudicial against this foreign individual since a similar requirement is not required for the U.S. national phase patent application since a copy has already been filed with the PCT International Application PCT/GB00/01926. Also, it is not required of U.S. citizens with regard to co-pending patent applications that were filed in the United States. Moreover, the standard for unity of invention is much more liberal under the PCT Regulations than under U.S. Regulations, which could also provide a hardship for this Foreign Applicant. It is respectfully believed that constitutional issues are raised when similarly situated applicants are treated differently based on their country of origin.

CONCLUSION:

The undersigned respectfully submits that the present application should be corrected to obtain U.S. national phase filing status. Upon review of the preliminary amendment identification heading and the transmittal document, the Applicant clearly and unequivocally expressed his intent to have a U.S. national phase patent application. The preliminary amendment was addressed to Box PCT, United States Designated/Elected Office (DO/EO/US), which only accepts PCT patent applications and not U.S. bypass continuation patent applications. The priority data makes no sense since it would have expired under 35 U.S.C. Section 119 if the application was a bypass continuation application and not a U.S. national phase patent application. Even though a standard transmittal document was utilized, mandated and required continuation information was specifically not provided by the Applicant. Therefore, this transmittal document can only indicate a U.S. national phase patent application since it is the only other option besides the bypass continuation patent application for this preliminary amendment.

In the alternative, the United States Patent Office specifically allows for later submission of major portions of a patent application and still grants the applicant the filing date of the initial submission. In view of this, there is nothing under either 37 C.F.R. Section 1.53(c) or 37 C.F.R. Section 1.182 that precludes one of these omitted pages from being the transmittal document, especially since the transmittal document plays a very trivial role and does not define the scope of the patent protection like the missing pages from a patent specification or missing drawings. The recommended transmittal document, as filed-out for this Patent Application, is attached herein as Appendix H.

Also, since an applicant who completely ignores the filing deadline for a PCT application can file a petition that explains that the delay was unintentional and easily receives a U.S. national phase application should not be in a superior position to an applicant who has fully complied with 35 U.S.C. Section 371 by filing all requisite items within the requisite time period.

Moreover, the loss of U.S. national phase status for this Foreign Applicant will operate as an extreme hardship by requiring a certified copy of a foreign patent application, which the Applicant has already provided as part of the international application process. It is also very prejudicial to this Applicant since similarly situated U.S. Applicants claiming priority from

copending U.S. patent applications are not under this same requirement. This also applies to the unity of invention standard, which is more liberal under the Patent Cooperation Treaty than under U.S. law and will operate to this Foreign Applicant's extreme prejudicial detriment.

Therefore, Applicant respectfully requests conversion of this patent application to a U.S. national phase patent application. Please charge the petition fee of \$130 as set forth in 37 C.F.R. Section 1.17(h) and any other charges necessitated by this petition to Account No. 11-0160. If a telephone conference would facilitate resolving any issue related to this petition, the undersigned attorney for Applicant would appreciate and welcome such a telephone conference. The attorney for Applicant may be contacted as provided below.

Respectfully submitted,

Dated: February 14, 2002



Kevin M. Kercher
Registration No. 33,408
Blackwell Sanders Peper Martin L.L.P.
720 Olive Street, 24th Floor
St. Louis, MO 63101
(314) 345-6249
Attorney for Applicant



APPENDIX

- Appendix A Petition for Revival of an International Application for Patent Designating the U.S. Abandoned Unintentionally under 37 C.F.R. Section 1.137(b)
- Appendix B Preliminary Amendment
- Appendix C Official Gazette Notices dated February 5, 2002
- Appendix D Transmittal Document
- Appendix E P. 846 of *The New Lexicon Webster's Dictionary* (1987)
- Appendix F P.975 of *The New Lexicon Webster's Dictionary* (1987)
- Appendix G Page 7 of PCT Applicant's Guide – Volume II
- Appendix H Correct Transmittal Form for this Patent Application

RECEIVED
FEB 27 2002
GROUP 3600

APPENDIX A



APPENDIX A

PTO/SB/64/PCT (10-00)

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PETITION FOR REVIVAL OF AN INTERNATIONAL APPLICATION FOR PATENT DESIGNATING THE U.S. ABANDONED UNINTENTIONALLY UNDER 37 CFR 1.137(b)

Docket Number (Optional)

First named inventor:

International (PCT) Application No.:

U.S. Application No.:
(if known)

Filed:

Title:

Attention: PCT Legal Staff
Box PCT
Assistant Commissioner for Patents
Washington, D.C. 20231

The above-identified application became abandoned as to the United States because the fees and documents required by 35 U.S.C. 371(c) were not filed prior to the expiration of the time set in 37 CFR 1.494(b) or (c) or 1.495(b) or (c) as applicable). The date of abandonment is the day after the date on which the 35 U.S.C. 371(c) requirements were due. See 37 CFR 1.494(g) or 1.495(h).

APPLICANT HEREBY PETITIONS FOR REVIVAL OF THIS APPLICATION

NOTE: A grantable petition requires the following items:

- (1) Petition fee
- (2) Proper reply
- (3) Terminal disclaimer with disclaimer fee--required for all international applications having an international filing date before June 8, 1995; and
- (4) Statement that the entire delay was unintentional.

1. Petition fee

- Small entity - fee \$_____ (37 CFR 1.17(m)). Applicant claims small entity status.
See 37 CFR 1.27.
- Other than small entity - fee \$_____ (37 CFR 1.17(m))

RECEIVED

FEB 27 2002

2. Proper reply

A. The proper reply (the missing 35 U.S.C. 371(c) requirement(s) in the form of _____ (identify type of reply):

- has been filed previously on _____.
- is enclosed herewith.

GROUP 3600

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

3. Terminal disclaimer with disclaimer fee

Since this international application has an international filing date on or after June 8, 1995, no terminal disclaimer is required.

A terminal disclaimer (and disclaimer fee (37 CFR 1.20(d)) of \$_____ for a small entity or \$_____ for other than a small entity) disclaiming the required period of time is enclosed herewith (see PTO/SB/63).

4. Statement. The entire delay in filing the required reply from the due date for the required reply until the filing of a grantable petition under 37 CFR 1.137(b) was unintentional.

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

Date

SignatureTelephone
Number: (

)

Typed or printed name

Address

Enclosures: Response
 Fee Payment
 Terminal Disclaimer Form

APPENDIX B



APPENDIX B

PATENT
717901.16

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of William Plenderleith :
Application No.: Unknown :
Filed: Herewith :
PCT No.: PCT/GB00/01926 :
International Filing Date: 22 May 2000 :
Priority Data: 22 May 1999 (Great Britain) :
For: SPORTS VEHICLE :

Examiner: Unknown
Group Art Unit: Unknown
Attorney Docket No.: 717901.16
Customer No.: 27,128
Confirmation No.: Unknown

Box PCT
United States Designated/Elected Office (DO/EO/US)
Commissioner for Patents
Washington, D.C. 20231

RECEIVED

FEB 27 2002

GROUP 3600

PRELIMINARY AMENDMENT

Sir:

Prior to examination, it is respectfully requested that the application be amended as follows:

Please delete the entire specification.

Please replace with the following substitute Specification in compliance with 37 C.F.R.

Section 1.125(b):

SPORTS VEHICLE

TECHNICAL FIELD

This invention relates to a sports vehicle that enables a person to travel downhill over terrain whose surface characteristics would render the use of a skateboard or snowboard impracticable, and in particular to a sports vehicle which may be ridden by a person standing on a platform on the vehicle.

BACKGROUND OF THE INVENTION

Devices such as the skateboard and snowboard are well known. The skateboard enables its user to travel over surfaces such as tarmac and concrete, which are relatively smooth and firm. The snowboard enables its user to travel over snow-covered surfaces, which offer a low coefficient of friction. Neither of these devices is suitable for travelling over grassland or any other terrain that lacks the smoothness and firmness required by the skateboard and the low coefficient of friction required by the snowboard.

SUMMARY OF THE INVENTION

The object of this invention is to provide a device that enables its user to indulge in pursuits similar to skateboarding and snowboarding over terrain such as grassland.

According to a first aspect of the present invention, there is provided a vehicle for travelling over grassland and similar terrain, said vehicle comprising a generally horizontal platform having attached to its underside one or more rotatable disks each having a lower surface adapted to contact the ground, each of said one or more rotatable disks arranged to rotate about a generally vertical axis, the underside of each of said one or more rotatable disks being substantially convex in form.

Preferably, said vehicle has two or more rotatable disks arranged along a longitudinal

axis of said platform.

Preferably, said platform is resiliently pliable. Preferably, said platform comprises a first area on its upper side towards the front of said platform adapted to receive one foot of the user, and a second area on its upper side towards the rear of said platform adapted to receive the other foot of the user, said platform comprising a central portion between said first and second areas adapted to flex resiliently about a lateral axis in the plane of said platform. Preferably, said first and second areas are provided with boot or shoe retention means. The platform may further comprise a hinge mechanism extending laterally across said platform to aid pliability. The first area of the platform may be provided with a first rotatably mounted foot support member, while the second area of the platform may be provided with a second rotatably mounted foot support member. Preferably each foot support member is rotatably mounted such that its axis of rotation is substantially coincident with the axis of rotation of a rotatable disk. Preferably said first and second foot support members are each provided with boot or shoe retention means.

Preferably, said central portion comprises a portion of said platform having a reduced cross-sectional area. Preferably, said central portion comprises a waist portion of the platform having a reduced width.

In one embodiment the platform may have a generally concave shape in a longitudinal direction in its unstressed state, such that the central portion of the platform is lower than the ends of the platform. In another embodiment the platform may have a generally convex shape in a longitudinal direction in its unstressed state, such that the central portion of the platform is higher than the ends of the platform.

Preferably, each of said one or more rotatable disks is supported on a spindle attached to the underside of said platform. Preferably, said vehicle further comprises additional support

means adapted to provide additional support for each of said one or more rotatable disks in addition to said spindle. Preferably, said additional support means is either a plurality of idler wheels or rollers. Alternatively, each of said one or more rotatable disks is supported solely by either a plurality of idler wheels, a plurality of rollers, or a plurality of balls.

Preferably, each of said one or more rotatable disks is solid.

Alternatively, each of said one or more rotatable disks is hollow, said upper surface of each of said one or more rotatable disks being substantially concave in form. Preferably, said platform is shaped so as to follow the form of said concave upper surface of each of said one or more hollow rotatable disks.

Preferably, the lower surface of each of said one or more rotatable disks is substantially in the form of part of the surface of a sphere. Alternatively, the lower surface of each of said one or more rotatable disks may be substantially in the form of part of the surface of an ellipsoid, a truncated cone, or a truncated toroid.

Preferably, said vehicle further comprises means for the attachment of a sail, to permit the user to traverse substantially level terrain.

Preferably, the platform and rotatable disks are made of composite plastics materials, and the other parts that support the rotatable disks are made of metal, but the platform may instead be made of natural materials, such as wood, and the rotatable disks may be made of metal.

According to a second aspect of the present invention there is provided a vehicle for travelling over grassland and similar terrain, said vehicle comprising a substantially horizontal platform having attached to its underside three or more rotatable disks arranged longitudinally, at least one of said rotatable disks having a first inclined axis, and at least one rotatable disk having a second inclined axis inclined in the opposite sense to said first inclined axis.

BRIEF DESCRIPTION OF THE DRAWINGS

A preferred embodiment of the invention will now be described with reference to the accompanying drawings in which:

Figs. 1a and 1b show a side elevation and plan view respectively of a vehicle according to the invention, with the mounting spindle shown schematically;

Figs. 2a and 2b show an end elevation and plan view respectively of the vehicle of Fig. 1 with the platform parallel to the ground;

Figs. 3a and 3b show an end elevation and plan view respectively of the vehicle of Fig. 1 with the platform tilted to one side;

Figs. 4a and 4b show a side elevation and plan view respectively of the vehicle of Fig. 1 when positioned on a sloping surface;

Figs. 5a and 5b show a side elevation and plan view respectively of another vehicle according to the invention having two rotatable disks with the platform flat, the mounting spindles being shown schematically;

Figs. 6a and 6b show a side elevation and plan view respectively of the vehicle of Fig. 5 with the platform curved upwards towards its ends;

Figs. 7a and 7b show a side elevation and plan view respectively of the vehicle of Fig. 5 with the platform curved downwards towards its ends;

Fig. 8a shows a longitudinal section through a vehicle according to the invention showing the rotatable disk mounting arrangement with a central spindle;

Fig. 8b is an enlarged view of part of the longitudinal section of Fig. 8a;

Fig. 9 shows a transverse section through a solid rotatable disk of the vehicle of Fig. 8a;

Fig. 10 shows a transverse section through a hollow rotatable disk;

Fig. 11 shows a transverse section through a rotatable disk mounting arrangement with no central spindle of another vehicle according to the invention;

Fig. 12 shows a transverse section through another platform according to the invention in which the platform follows the form of the rotatable disks;

Figs. 13a and 13b show a side elevation and an end elevation respectively of a vehicle according to a further embodiment of the invention;

Fig. 14 shows a plan view of a vehicle according to a further embodiment of the invention having rotatable foot supports; and

Fig. 15 shows a plan view of the vehicle of Fig. 14 with the foot supports in a rotated position.

DETAILED DESCRIPTION OF THE INVENTION

In the embodiments illustrated in Figs. 1 to 4, the vehicle according to the invention comprises a platform 1 capable of supporting the user and having on its underside one or more rotatable disks 2. Each rotatable disk 2 rotates about a spindle 3, which is attached at one end to the underside of the platform with its axis perpendicular to the underside of the platform. The user stands on the platform, with his feet in approximately the position 4 shown in Fig. 1, and he may adopt a crouching stance to enable him to grip handgrips 5 located at each end of the platform.

When the platform 1 is parallel to the ground, as shown in Fig. 2, the point of contact 20 with the ground 30 of each rotatable disk 2 (as seen in plan view) is coincident with the center of the rotatable disk 2, and any force applied in the plane of the platform 1 will not result in a turning moment being applied to the rotatable disks 2. However, when the platform 1 is tilted to one side, as shown in Fig. 3, the point of contact 22 of each disk 2 with the ground 30 is not

coincident with the center 24 of the rotatable disk 2, and a force applied to the platform 1 will normally cause a turning moment to be applied to the rotatable disks 2.

As shown in Fig. 4, when the platform 1 is resting on a sloping surface 32 of sufficient gradient, and is tilted in a direction other than the direction of maximum gradient, the turning moment induced in the rotatable disks 2 is sufficient to overcome the friction that exists at the point of contact 22 with the ground 32, and the device travels in a downhill direction.

Fig. 5 shows an embodiment of the vehicle of the invention having two rotatable disks 2 and a pliable platform 1 with handgrips 5 at each end. When the platform 1 is flat, the imaginary lines 40 joining the center 24 of each rotatable disk 2 to its point of contact 22 with the ground (as seen in plan view) are perpendicular to the longitudinal axis of the platform, and the vehicle travels in the direction of the longitudinal axis, indicated by the arrow 42. However, if the ends 44 of the platform are pulled upwards by the user pulling on the handgrips 5, causing the platform 1 to assume a curvature of the type shown in Fig. 6, that is a concave curvature of the upper face of the platform 1, the imaginary lines 46 joining the center 24 of each rotatable disk 2 to its point of contact 22a with the ground are no longer perpendicular to the longitudinal axis and the vehicle steers towards the side 45 to which it has been tilted, in the direction of the arrow 48. Conversely, if the ends 44 of the platform 1 are pushed downwards by the user, causing the platform to assume a curvature of the type shown in Fig. 7, that is a convex curvature of the upper face of the platform 1, the device steers towards the opposite side, in the direction of arrow 52. The imaginary lines 50 joining the center 24 of each rotatable disk 2 to its point of contact 22b with the ground are not perpendicular to the longitudinal axis and the vehicle steers away from the side to which it has been tilted.

Figs. 8a and 8b show a detailed embodiment of a vehicle according to the invention. In

this embodiment, handgrips 5a are provided in the form of a longitudinal extension of the platform 1 at each end of the platform beyond the outer edge of the adjacent rotatable disk 2. A metal spindle 3 is attached by bolts 60 or other means to the underside of the platform 1. Rolling element bearings 6 are fitted between the spindle 3 and the rotatable disk 2 to reduce the friction and wear arising from rotation of the rotatable disk on the spindle, and the assembly is made secure by a nut 7 secured to the threaded end 62 of the spindle 3, so that the two bearings 6 are held between the nut 7 and a shoulder 64 provided at the upper end of the spindle 3.

The underside of each of the rotatable disks 2 may take a variety of forms, including a segment of a sphere, a segment of an ellipsoid, a truncated cone, a truncated toroid or a combination of these forms. The choice of form is dictated by the contact area required to prevent the rotatable disk sinking into the ground; the nature of the undulations inherent in the terrain over which the device is to be used; and the requirement that the device should not be unduly difficult to balance.

The rotatable disks 2 may be of solid construction, as shown in Fig. 9, or hollow construction, as shown in Fig. 10. The material may be a moldable plastic or resin, metal, alloy, composite or any material which can be formed and has the requisite strength and stiffness. Hollow rotatable disks have an outer shell 70 and may have internal ribs 76 (shown in Fig. 13a) to increase their stiffness. Where hollow construction is used, as shown in Fig. 10, one or more idler wheels 8 may be employed to provide additional support to the rotatable disks 2, as shown in Fig 10. Each idler wheel is rotatably mounted on a bracket (not shown) which is fixed to the underside of the platform 1. The wheel 8 is oriented so that its axis of rotation 72 is parallel to the contact surface 74 on the disk 2. The provision of idler wheels 8 serves to reduce the bending moment which must be withstood by the spindle 3 and its bolted connection to the

platform 1. It is to be understood that roller or balls may be used to support the edges of the disks 2 in the same way as the idler wheels 8 described above.

Fig. 11 shows an alternative form of rotational support by means of which a disk 2 may be rotatably mounted on the platform 1. A plurality of balls 9 are mounted circumferentially in a ball support channel formed by an outer flange 80 attached to the disk 2 and an inner flange 82 mounted securely to the underside of the platform 1. It is to be understood that other forms of roller or ball bearing which extend around the circumference of the rotatable disk 2 may be used.

Where hollow rotatable disks 2 are used, the platform 1 may be formed in such a way that it follows the form of the upper surface 90 of the rotatable disks 2, as shown in Fig. 12. The user's feet are placed in the concave section of the platform 1. This configuration enables the user to remain closer to the ground and to stand on a surface that is approximately parallel to the ground, since if the user applies weight at a point 92 to one side of the longitudinal axis of the platform 1, then the vehicle 1 will tilt about the longitudinal axis so that the point 94 on the disk 2 comes into contact with the ground 30 and the adjacent part of the platform at point 92 is substantially parallel to the ground 30. In addition, this concave section could be adapted to provide a flat, horizontal surface for the user's feet when the platform is tilted to the appropriate angle, if the upper surface is profiled to the shape shown by the dotted line 96.

A further embodiment of the invention is shown in Fig. 13 which has three rotatable disks 2 mounted on the underside of the platform 1. The two rotatable disks 2a at the ends of the platform 1 are tilted by a particular tilt angle about the longitudinal axis of the platform 1 in one direction, whilst the central rotatable disk 2b is angled by the same or similar tilt angle in the opposite direction. With this arrangement, the platform 1 remains horizontal, but the vehicle can still be steered by deflection of the platform 1 as with the other embodiments.

Figs. 14 and 15 illustrate an embodiment in which the top of the platform 1 is provided with rotatable foot support members 100 which are connected by a rotatable hinge 102 to a point on the upper surface of the platform 1 corresponding to the center of rotation of the disk 2. The foot support members 100 in the illustrated embodiment are in the form of rigid plates, which may have rollers, bearings or low-friction coatings (not shown) on their underside so that they can rotate freely with respect to the platform 1. The same spindle 3 used to mount the rotatable disk 2 can also be used to mount the hinge 102. In this way the foot support members 100 can rotate about axes coincident with the axes of the rotatable disks 2. The user places his feet on the foot support members 100 and applies his weight through his heels in the normal manner to tilt the platform to one side. If he then moves his heels closer together and thereby rotates the foot support members 100 to the position 100a in Fig. 15, then the platform will assume a "concave up" position, as shown in Fig. 6, causing the vehicle to steer to one side. If he moves his heels further apart and thereby rotates the foot support members 100 to the position 100b in Fig. 15, then the platform will assume a "concave down" position, as shown in Fig. 7, causing the vehicle to steer to the other side. The foot support members may be of any suitable shape and may be fitted with boot or shoe retention devices, such as a simple toe strap 104 or any device of the sort known in the art of snowboarding, skiing and roller skating.

The device could also be provided with means to which a sail and mast may be attached, if the user was to traverse substantially level terrain. The attachment of such a sail would therefore enable the user to cross terrain with the minimum of effort being required.

Pliability of the platform 1 may be achieved by constructing it entirely of flexible materials, or by using a combination of rigid materials in the vicinity of the user's feet and flexible materials for the middle portion. A region of reduced cross-sectional area may also be

incorporated in the platform to facilitate deflection, or a mechanical hinge (not shown) may be employed, which extends across the width of the platform. The hinge may have some form of damping arrangement, to prevent the platform from being too flexible.

The illustrated embodiments show the platform 1 to have a generally flat shape in the unstressed state. However it is to be understood that the platform may, in its unstressed condition, have a concave or convex upper surface, of the form illustrated in Figs 6a or 7a respectively. Having such a shape will give the vehicle a natural tendency to steer to one side or the other in the absence of a specific deflection of the platform by the user. In such circumstances a user can adopt a zigzag course by standing on one side of the platform 1 while proceeding on a first leg of the zigzag course, then at the turning point rotating the board through 180° about a vertical axis and standing on what is effectively the other side of the platform 1 while proceeding on the second leg of the zigzag course.

These and other modifications and variations are possible without departing from the scope of the invention.

CLAIMS

1. A vehicle for travelling over grassland and similar terrain, said vehicle comprising a generally horizontal platform having attached to its underside two or more rotatable disks each having a lower surface adapted to contact the ground, each of said two or more rotatable disks arranged to rotate about a generally vertical axis, the underside of each of said two or more rotatable disks being substantially convex in form.
2. The vehicle according to Claim 1, wherein said two or more rotatable disks are arranged along a longitudinal axis of said platform.
3. The vehicle according to Claim 1, wherein said vehicle has two rotatable disks arranged along a longitudinal axis of said platform.
4. The vehicle according to Claim 1, wherein said platform is resiliently pliable.
5. The vehicle according to Claim 1, wherein said platform comprises a first area on its upper side towards the front of said platform adapted to receive one foot of the user, and a second area on its upper side towards the rear of said platform adapted to receive the other foot of the user, said platform comprising a central portion between said first and second areas adapted to flex resiliently about a lateral axis in the plane of said platform.
6. The vehicle according to Claim 5, wherein the first area of the platform is provided with a first rotatably mounted foot support member, and the second area of the platform is provided with a second rotatably mounted foot support member.
7. The vehicle according to Claim 6, wherein each foot support member is rotatably mounted such that its axis of rotation is substantially coincident with the axis of rotation of a rotatable disk.
8. The vehicle according to Claim 6, wherein said first and second foot support

members are each provided with boot or shoe retention means.

9. The vehicle according to Claim 1, wherein said central portion comprises a portion of said platform having a reduced cross-sectional area.

10. The vehicle according to Claim 1, wherein the platform has a generally concave shape in a longitudinal direction in its unstressed state, such that the central portion of the platform is lower than the ends of the platform.

11. The vehicle according to Claim 1, wherein the platform has a generally convex shape in a longitudinal direction in its unstressed state, such that the central portion of the platform is higher than the ends of the platform.

12. The vehicle according to Claim 1, wherein each of said two or more rotatable disks is supported on a spindle attached to the underside of said platform.

13. The vehicle according to Claim 12, wherein said vehicle further comprises additional support means adapted to provide additional support for each of said two or more rotatable disks in addition to said spindle.

14. The vehicle according to Claim 13, wherein said additional support means is a plurality of idler wheels.

15. The vehicle according to Claim 13, wherein said additional support means is a plurality of rollers.

16. The vehicle according to Claim 1, wherein each of said two or more rotatable disks is supported by a support means selected from the group of support means comprising a plurality of idler wheels, a plurality of rollers, and a plurality of balls.

17. The vehicle according to Claim 1, wherein each of said two or more rotatable disks is solid.

18. The vehicle according to Claim 1, wherein each of said two or more rotatable disks is hollow, said upper surface of each of said two or more rotatable disks being substantially concave in form.

19. The vehicle according to Claim 18, wherein said platform is shaped so as to follow the form of said concave upper surface of each of said two or more hollow rotatable disks.

20. The vehicle according to Claim 1, wherein the lower surface of each of said two or more rotatable disks is substantially in the form of part of the surface of a sphere, an ellipsoid, a truncated cone, or a truncated toroid.

21. The vehicle according to Claim 2, the axis of rotation of at least one of said rotatable disks being inclined in a first rotational sense about the longitudinal axis of the platform, and the axis of rotation of at least one other rotatable disk being inclined in an opposite rotational sense about the longitudinal axis of the platform.

22. The vehicle according to Claim 21, wherein the platform has attached to its underside three or more rotatable disks arranged along the longitudinal axis of said platform.

ABSTRACT

A sports vehicle which includes a substantially horizontal platform capable of supporting the user and having attached to its underside two or more rotatable disks arranged to rotate about substantially vertical axes, the underside of each rotatable disk being substantially convex in form. The platform is resilient and can adopt a convex or concave shape, so as to steer the vehicle. The user places his feet on the platform and steers the vehicle by tilting the platform using his body weight. The vehicle enables its user to travel over grassland and similar terrain in a manner similar to skateboarding and snowboarding.

REMARKS

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "VERSION WITH MARKINGS TO SHOW CHANGES MADE".

Applicant has amended the specification and abstract to comport with United States Patent and Trademark Office Rules. No new matter is added. Applicant has amended the claims to eliminate multiple dependency and to comport with U.S. practice, which is totally unrelated to patentability. No new matter is added.

In view of the above, it is respectfully believed that all the presently submitted claims are allowable and a Formal Notice of Allowance is courteously solicited. It is believed that the application is in condition for allowance, however, if the Examiner feels otherwise, a telephone interview is respectfully requested. An early notice of allowance is solicited.

Respectfully submitted,

Date: November 29, 2001



Kevin M. Kercher, Reg. No. 33,408
Blackwell Sanders Peper Martin LLP
720 Olive Street, 24th Floor
St. Louis, MO 63101
Telephone: (314) 345-6000
Fax: (314) 345-6060

VERSION WITH MARKINGS TO SHOW CHANGES MADE

Following is a marked-up version of the Specification with all changes shown by conventional comparison (underlining and bracketeting):

SPORTS VEHICLE

TECHNICAL FIELD

This invention relates to a sports vehicle that enables a person to travel downhill over terrain whose surface characteristics would render the use of a skateboard or snowboard impracticable, and in particular to a sports vehicle which may be ridden by a person standing on a platform on the vehicle.

BACKGROUND OF THE INVENTION

Devices such as the skateboard and snowboard are well known. The skateboard enables its user to travel over surfaces such as tarmac and concrete, which are relatively smooth and firm. The snowboard enables its user to travel over snow-covered surfaces, which offer a low coefficient of friction. Neither of these devices is suitable for travelling over grassland or any other terrain that lacks the smoothness and firmness required by the skateboard and the low coefficient of friction required by the snowboard.

SUMMARY OF THE INVENTION

The object of this invention is to provide a device that enables its user to indulge in pursuits similar to skateboarding and snowboarding over terrain such as grassland.

According to a first aspect of the present invention, there is provided a vehicle for travelling over grassland and similar terrain, said vehicle comprising a generally horizontal platform having attached to its underside one or more rotatable disks each having a lower surface adapted to contact the ground, each of said one or more rotatable disks arranged to rotate about a generally vertical axis, the underside of each of said one or more rotatable disks being substantially convex in form.

Preferably, said vehicle has two or more rotatable disks arranged along a longitudinal axis of said platform.

Preferably, said platform is resiliently pliable. Preferably, said platform comprises a first area on its upper side towards the front of said platform adapted to receive one foot of the user, and a second area on its upper side towards the rear of said platform adapted to receive the other foot of the user, said platform comprising a central portion between said first and second areas adapted to flex resiliently about a lateral axis in the plane of said platform. Preferably, said first and second areas are provided with boot or shoe retention means. The platform may further comprise a hinge mechanism extending laterally across said platform to aid pliability. The first area of the platform may be provided with a first rotatably mounted foot support member, while the second area of the platform may be provided with a second rotatably mounted foot support member. Preferably each foot support member is rotatably mounted such that its axis of rotation is substantially coincident with the axis of rotation of a rotatable disk. Preferably said first and second foot support members are each provided with boot or shoe retention means.

Preferably, said central portion comprises a portion of said platform having a reduced cross-sectional area. Preferably, said central portion comprises a waist portion of the platform having a reduced width.

In one embodiment the platform may have a generally concave shape in a longitudinal direction in its unstressed state, such that the central portion of the platform is lower than the ends of the platform. In another embodiment the platform may have a generally convex shape in a longitudinal direction in its unstressed state, such that the central portion of the platform is higher than the ends of the platform.

Preferably, each of said one or more rotatable disks is supported on a spindle attached to

the underside of said platform. Preferably, said vehicle further comprises additional support means adapted to provide additional support for each of said one or more rotatable disks in addition to said spindle. Preferably, said additional support means is either a plurality of idler wheels or rollers. Alternatively, each of said one or more rotatable disks is supported solely by either a plurality of idler wheels, a plurality of rollers, or a plurality of balls.

Preferably, each of said one or more rotatable disks is solid.

Alternatively, each of said one or more rotatable disks is hollow, said upper surface of each of said one or more rotatable disks being substantially concave in form. Preferably, said platform is shaped so as to follow the form of said concave upper surface of each of said one or more hollow rotatable disks.

Preferably, the lower surface of each of said one or more rotatable disks is substantially in the form of part of the surface of a sphere. Alternatively, the lower surface of each of said one or more rotatable disks may be substantially in the form of part of the surface of an ellipsoid, a truncated cone, or a truncated toroid.

Preferably, said vehicle further comprises means for the attachment of a sail, to permit the user to traverse substantially level terrain.

Preferably, the platform and rotatable disks are made of composite plastics materials, and the other parts that support the rotatable disks are made of metal, but the platform may instead be made of natural materials, such as wood, and the rotatable disks may be made of metal.

According to a second aspect of the present invention there is provided a vehicle for travelling over grassland and similar terrain, said vehicle comprising a substantially horizontal platform having attached to its underside three or more rotatable disks arranged longitudinally, at least one of said rotatable disks having a first inclined axis, and at least one rotatable disk having

a second inclined axis inclined in the opposite sense to said first inclined axis.

BRIEF DESCRIPTION OF THE DRAWINGS

A preferred embodiment of the invention will now be described with reference to the accompanying drawings in which:

Figs. 1a and 1b show a side elevation and plan view respectively of a vehicle according to the invention, with the mounting spindle shown schematically;

Figs. 2a and 2b show an end elevation and plan view respectively of the vehicle of Fig. 1 with the platform parallel to the ground;

Figs. 3a and 3b show an end elevation and plan view respectively of the vehicle of Fig. 1 with the platform tilted to one side;

Figs. 4a and 4b show a side elevation and plan view respectively of the vehicle of Fig. 1 when positioned on a sloping surface;

Figs. 5a and 5b show a side elevation and plan view respectively of another vehicle according to the invention having two rotatable disks with the platform flat, the mounting spindles being shown schematically;

Figs. 6a and 6b show a side elevation and plan view respectively of the vehicle of Fig. 5 with the platform curved upwards towards its ends;

Figs. 7a and 7b show a side elevation and plan view respectively of the vehicle of Fig. 5 with the platform curved downwards towards its ends;

Fig. 8a shows a longitudinal section through a vehicle according to the invention showing the rotatable disk mounting arrangement with a central spindle;

Fig. 8b is an enlarged view of part of the longitudinal section of Fig. 8a;

Fig. 9 shows a transverse section through a solid rotatable disk of the vehicle of Fig. 8a;

Fig. 10 shows a transverse section through a hollow rotatable disk;

Fig. 11 shows a transverse section through a rotatable disk mounting arrangement with no central spindle of another vehicle according to the invention;

Fig. 12 shows a transverse section through another platform according to the invention in which the platform follows the form of the rotatable disks;

Figs. 13a and 13b show a side elevation and an end elevation respectively of a vehicle according to a further embodiment of the invention;

Fig. 14 shows a plan view of a vehicle according to a further embodiment of the invention having rotatable foot supports; and

Fig. 15 shows a plan view of the vehicle of Fig. 14 with the foot supports in a rotated position.

DETAILED DESCRIPTION OF THE INVENTION

In the embodiments illustrated in Figs. 1 to 4, the vehicle according to the invention comprises a platform 1 capable of supporting the user and having on its underside one or more rotatable disks 2. Each rotatable disk 2 rotates about a spindle 3, which is attached at one end to the underside of the platform with its axis perpendicular to the underside of the platform. The user stands on the platform, with his feet in approximately the position 4 shown in Fig. 1, and he may adopt a crouching stance to enable him to grip handgrips 5 located at each end of the platform.

When the platform 1 is parallel to the ground, as shown in Fig. 2, the point of contact 20 with the ground 30 of each rotatable disk 2 (as seen in plan view) is coincident with the [centre] center of the rotatable disk 2, and any force applied in the plane of the platform 1 will not result in a turning moment being applied to the rotatable disks 2. However, when the platform 1 is

tilted to one side, as shown in Fig. 3, the point of contact 22 of each disk 2 with the ground 30 is not coincident with the [centre] center 24 of the rotatable disk 2, and a force applied to the platform 1 will normally cause a turning moment to be applied to the rotatable disks 2.

As shown in Fig. 4, when the platform 1 is resting on a sloping surface 32 of sufficient gradient, and is tilted in a direction other than the direction of maximum gradient, the turning moment induced in the rotatable disks 2 is sufficient to overcome the friction that exists at the point of contact 22 with the ground 32, and the device travels in a downhill direction.

Fig. 5 shows an embodiment of the vehicle of the invention having two rotatable disks 2 and a pliable platform 1 with handgrips 5 at each end. When the platform 1 is flat, the imaginary lines 40 joining the [centre] center 24 of each rotatable disk 2 to its point of contact 22 with the ground (as seen in plan view) are perpendicular to the longitudinal axis of the platform, and the vehicle travels in the direction of the longitudinal axis, indicated by the arrow 42. However, if the ends 44 of the platform are pulled upwards by the user pulling on the handgrips 5, causing the platform 1 to assume a curvature of the type shown in Fig. 6, that is a concave curvature of the upper face of the platform 1, the imaginary lines 46 joining the [centre] center 24 of each rotatable disk 2 to its point of contact 22a with the ground are no longer perpendicular to the longitudinal axis and the vehicle steers towards the side 45 to which it has been tilted, in the direction of the arrow 48. Conversely, if the ends 44 of the platform 1 are pushed downwards by the user, causing the platform to assume a curvature of the type shown in Fig. 7, that is a convex curvature of the upper face of the platform 1, the device steers towards the opposite side, in the direction of arrow 52. The imaginary lines 50 joining the [centre] center 24 of each rotatable disk 2 to its point of contact 22b with the ground are not perpendicular to the longitudinal axis and the vehicle steers away from the side to which it has been tilted.

Figs. 8a and 8b show a detailed embodiment of a vehicle according to the invention. In this embodiment, handgrips 5a are provided in the form of a longitudinal extension of the platform 1 at each end of the platform beyond the outer edge of the adjacent rotatable disk 2. A metal spindle 3 is attached by bolts 60 or other means to the underside of the platform 1. Rolling element bearings 6 are fitted between the spindle 3 and the rotatable disk 2 to reduce the friction and wear arising from rotation of the rotatable disk on the spindle, and the assembly is made secure by a nut 7 secured to the threaded end 62 of the spindle 3, so that the two bearings 6 are held between the nut 7 and a shoulder 64 provided at the upper end of the spindle 3.

The underside of each of the rotatable disks 2 may take a variety of forms, including a segment of a sphere, a segment of an ellipsoid, a truncated cone, a truncated toroid or a combination of these forms. The choice of form is dictated by the contact area required to prevent the rotatable disk sinking into the ground; the nature of the undulations inherent in the terrain over which the device is to be used; and the requirement that the device should not be unduly difficult to balance.

The rotatable disks 2 may be of solid construction, as shown in Fig. 9, or hollow construction, as shown in Fig. 10. The material may be a [mouldable] moldable plastic or resin, metal, alloy, composite or any material which can be formed and has the requisite strength and stiffness. Hollow rotatable disks have an outer shell 70 and may have internal ribs 76 (shown in Fig. 13a) to increase their stiffness. Where hollow construction is used, as shown in Fig. 10, one or more idler wheels 8 may be employed to provide additional support to the rotatable disks 2, as shown in Fig 10. Each idler wheel is rotatably mounted on a bracket (not shown) which is fixed to the underside of the platform 1. The wheel 8 is oriented so that its axis of rotation 72 is parallel to the contact surface 74 on the disk 2. The provision of idler wheels 8 serves to reduce

the bending moment which must be withstood by the spindle 3 and its bolted connection to the platform 1. It is to be understood that roller or balls may be used to support the edges of the disks 2 in the same way as the idler wheels 8 described above.

Fig. 11 shows an alternative form of rotational support by means of which a disk 2 may be rotatably mounted on the platform 1. A plurality of balls 9 are mounted circumferentially in a ball support channel formed by an outer flange 80 attached to the disk 2 and an inner flange 82 mounted securely to the underside of the platform 1. It is to be understood that other forms of roller or ball bearing which extend around the circumference of the rotatable disk 2 may be used.

Where hollow rotatable disks 2 are used, the platform 1 may be formed in such a way that it follows the form of the upper surface 90 of the rotatable disks 2, as shown in Fig. 12. The user's feet are placed in the concave section of the platform 1. This configuration enables the user to remain closer to the ground and to stand on a surface that is approximately parallel to the ground, since if the user applies weight at a point 92 to one side of the longitudinal axis of the platform 1, then the vehicle 1 will tilt about the longitudinal axis so that the point 94 on the disk 2 comes into contact with the ground 30 and the adjacent part of the platform at point 92 is substantially parallel to the ground 30. In addition, this concave section could be adapted to provide a flat, horizontal surface for the user's feet when the platform is tilted to the appropriate angle, if the upper surface is profiled to the shape shown by the dotted line 96.

A further embodiment of the invention is shown in Fig. 13 which has three rotatable disks 2 mounted on the underside of the platform 1. The two rotatable disks 2a at the ends of the platform 1 are tilted by a particular tilt angle about the longitudinal axis of the platform 1 in one direction, whilst the central rotatable disk 2b is angled by the same or similar tilt angle in the opposite direction. With this arrangement, the platform 1 remains horizontal, but the vehicle can

still be steered by deflection of the platform 1 as with the other embodiments.

Figs. 14 and 15 illustrate an embodiment in which the top of the platform 1 is provided with rotatable foot support members 100 which are connected by a rotatable hinge 102 to a point on the upper surface of the platform 1 corresponding to the [centre] center of rotation of the disk 2. The foot support members 100 in the illustrated embodiment are in the form of rigid plates, which may have rollers, bearings or low-friction coatings (not shown) on their underside so that they can rotate freely with respect to the platform 1. The same spindle 3 used to mount the rotatable disk 2 can also be used to mount the hinge 102. In this way the foot support members 100 can rotate about axes coincident with the axes of the rotatable disks 2. The user places his feet on the foot support members 100 and applies his weight through his heels in the normal manner to tilt the platform to one side. If he then moves his heels closer together and thereby rotates the foot support members 100 to the position 100a in Fig. 15, then the platform will assume a "concave up" position, as shown in Fig. 6, causing the vehicle to steer to one side. If he moves his heels further apart and thereby rotates the foot support members 100 to the position 100b in Fig. 15, then the platform will assume a "concave down" position, as shown in Fig. 7, causing the vehicle to steer to the other side. The foot support members may be of any suitable shape and may be fitted with boot or shoe retention devices, such as a simple toe strap 104 or any device of the sort known in the art of snowboarding, skiing and roller skating.

The device could also be provided with means to which a sail and mast may be attached, if the user was to traverse substantially level terrain. The attachment of such a sail would therefore enable the user to cross terrain with the minimum of effort being required.

Pliability of the platform 1 may be achieved by constructing it entirely of flexible materials, or by using a combination of rigid materials in the vicinity of the user's feet and

flexible materials for the middle portion. A region of reduced cross-sectional area may also be incorporated in the platform to facilitate deflection, or a mechanical hinge (not shown) may be employed, which extends across the width of the platform. The hinge may have some form of damping arrangement, to prevent the platform from being too flexible.

The illustrated embodiments show the platform 1 to have a generally flat shape in the unstressed state. However it is to be understood that the platform may, in its unstressed condition, have a concave or convex upper surface, of the form illustrated in Figs 6a or 7a respectively. Having such a shape will give the vehicle a natural tendency to steer to one side or the other in the absence of a specific deflection of the platform by the user. In such circumstances a user can adopt a zigzag course by standing on one side of the platform 1 while proceeding on a first leg of the zigzag course, then at the turning point rotating the board through 180° about a vertical axis and standing on what is effectively the other side of the platform 1 while proceeding on the second leg of the zigzag course.

These and other modifications and variations are possible without departing from the scope of the invention.

1. CLAIMS

1. A vehicle for travelling over grassland and similar terrain, said vehicle comprising a generally horizontal platform having attached to its underside two or more rotatable disks each having a lower surface adapted to contact the ground, each of said two or more rotatable disks arranged to rotate about a generally vertical axis, the underside of each of said [one] two or more rotatable disks being substantially convex in form.
2. [A] The vehicle according to Claim 1, wherein said two or more rotatable disks are arranged along a longitudinal axis of said platform.
3. [A] The vehicle according to Claim 1, wherein said vehicle has two rotatable disks arranged along a longitudinal axis of said platform.
4. [A] The vehicle according to [any preceding] Claim 1, wherein said platform is resiliently pliable.
5. [A] The vehicle according to [any preceding] Claim 1, wherein said platform comprises a first area on its upper side towards the front of said platform adapted to receive one foot of the user, and a second area on its upper side towards the rear of said platform adapted to receive the other foot of the user, said platform comprising a central portion between said first and second areas adapted to flex resiliently about a lateral axis in the plane of said platform.
6. [A] The vehicle according to Claim 5, wherein the first area of the platform is provided with a first rotatably mounted foot support member, and the second area of the platform is provided with a second rotatably mounted foot support member.
7. [A] The vehicle according to Claim 6, wherein each foot support member is rotatably mounted such that its axis of rotation is substantially coincident with the axis of rotation of a rotatable disk.

8. [A] The vehicle according to Claim 6 [or 7], wherein said first and second foot support members are each provided with boot or shoe retention means.

9. [A] The vehicle according to [any preceding] Claim 1, wherein said central portion comprises a portion of said platform having a reduced cross-sectional area.

10. [A] The vehicle according to [any preceding] Claim 1, wherein the platform has a generally concave shape in a longitudinal direction in its unstressed state, such that the central portion of the platform is lower than the ends of the platform.

11. [A] The vehicle according to [any one of Claims 1 to 9] Claim 1, wherein the platform has a generally convex shape in a longitudinal direction in its unstressed state, such that the central portion of the platform is higher than the ends of the platform.

12. [A] The vehicle according to [any preceding] Claim 1, wherein each of said [one] two or more rotatable disks is supported on a spindle attached to the underside of said platform.

13. [A] The vehicle according to Claim 12, wherein said vehicle further comprises additional support means adapted to provide additional support for each of said [one] two or more rotatable disks in addition to said spindle.

14. [A] The vehicle [as claimed in] according to Claim 13, wherein said additional support means is a plurality of idler wheels.

15. [A] The vehicle [as claimed in] according to Claim 13, wherein said additional support means is a plurality of rollers.

16. [A] The vehicle [as claimed in any of Claims 1 to 12] according to Claim 1, wherein each of said [one] two or more rotatable disks is supported by a support means selected from the group of support means comprising a plurality of idler wheels, a plurality of rollers, and a plurality of balls.

17. [A] The vehicle according to [any preceding] Claim 1, wherein each of said [one] two or more rotatable disks is solid.

18. [A] The vehicle according to [any one of Claims 1 to 16] Claim 1, wherein each of said [one] two or more rotatable disks is hollow, said upper surface of each of said [one] two or more rotatable disks being substantially concave in form.

19. [A] The vehicle according to Claim 18, wherein said platform is shaped so as to follow the form of said concave upper surface of each of said [one] two or more hollow rotatable disks.

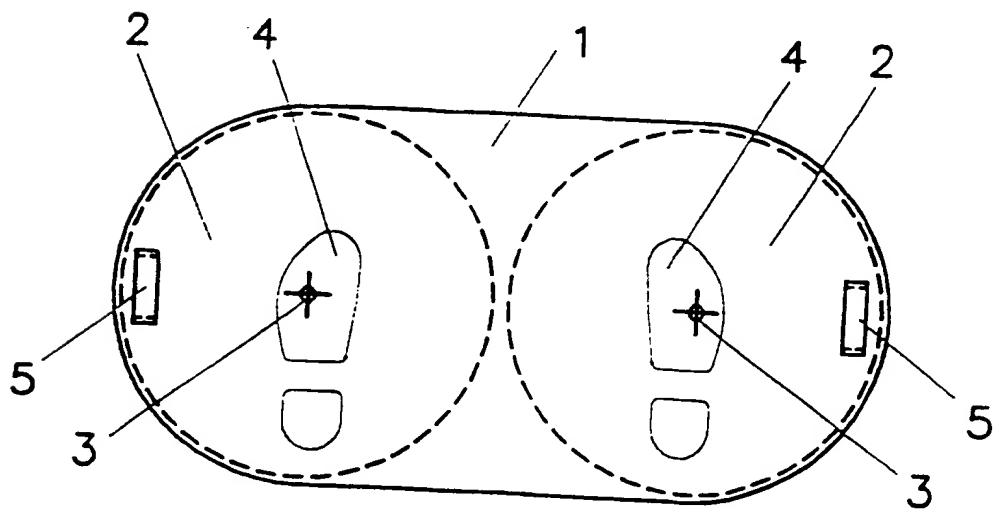
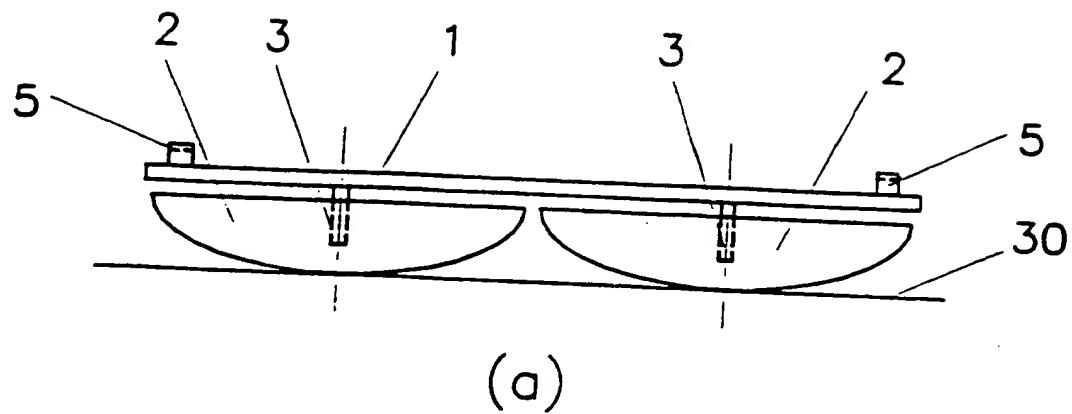
20. [A] The vehicle according to [any preceding] Claim 1, wherein the lower surface of each of said [one] two or more rotatable disks is substantially in the form of part of the surface of a sphere, an ellipsoid, a truncated cone, or a truncated toroid.

21. [A] The vehicle according to Claim 2, the axis of rotation of at least one of said rotatable disks being inclined in a first rotational sense about the longitudinal axis of the platform, and the axis of rotation of at least one other rotatable disk being inclined in an opposite rotational sense about the longitudinal axis of the platform.

22. [A] The vehicle according to Claim 21, wherein the platform has attached to its underside three or more rotatable disks arranged along the longitudinal axis of said platform.

ABSTRACT

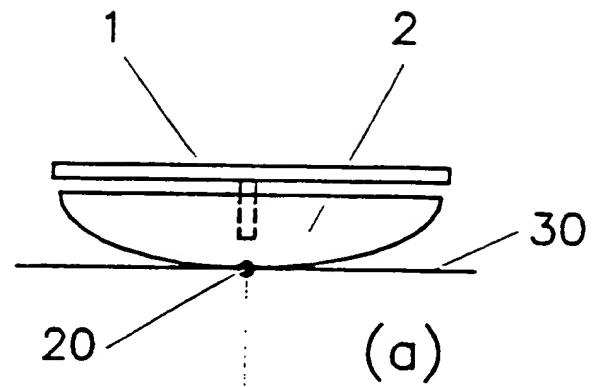
A sports vehicle which includes a substantially horizontal platform [(1)] capable of supporting the user and having attached to its underside two or more rotatable disks [(2)] arranged to rotate about substantially vertical axes [(3)], the underside of each rotatable disk being substantially convex in form. The platform is resilient and can adopt a convex or concave shape, so as to steer the vehicle. The user places his feet on the platform and steers the vehicle by tilting the platform using his body weight. The vehicle enables its user to travel over grassland and similar terrain in a manner similar to skateboarding and snowboarding.



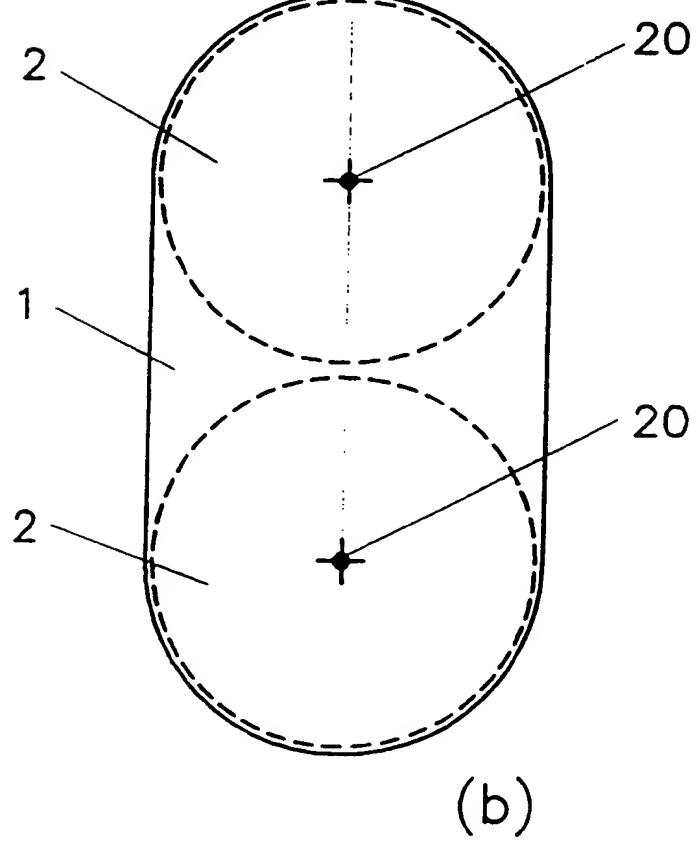
(b)

FIG. 1

2/12



(a)



(b)

FIG.2

3/12

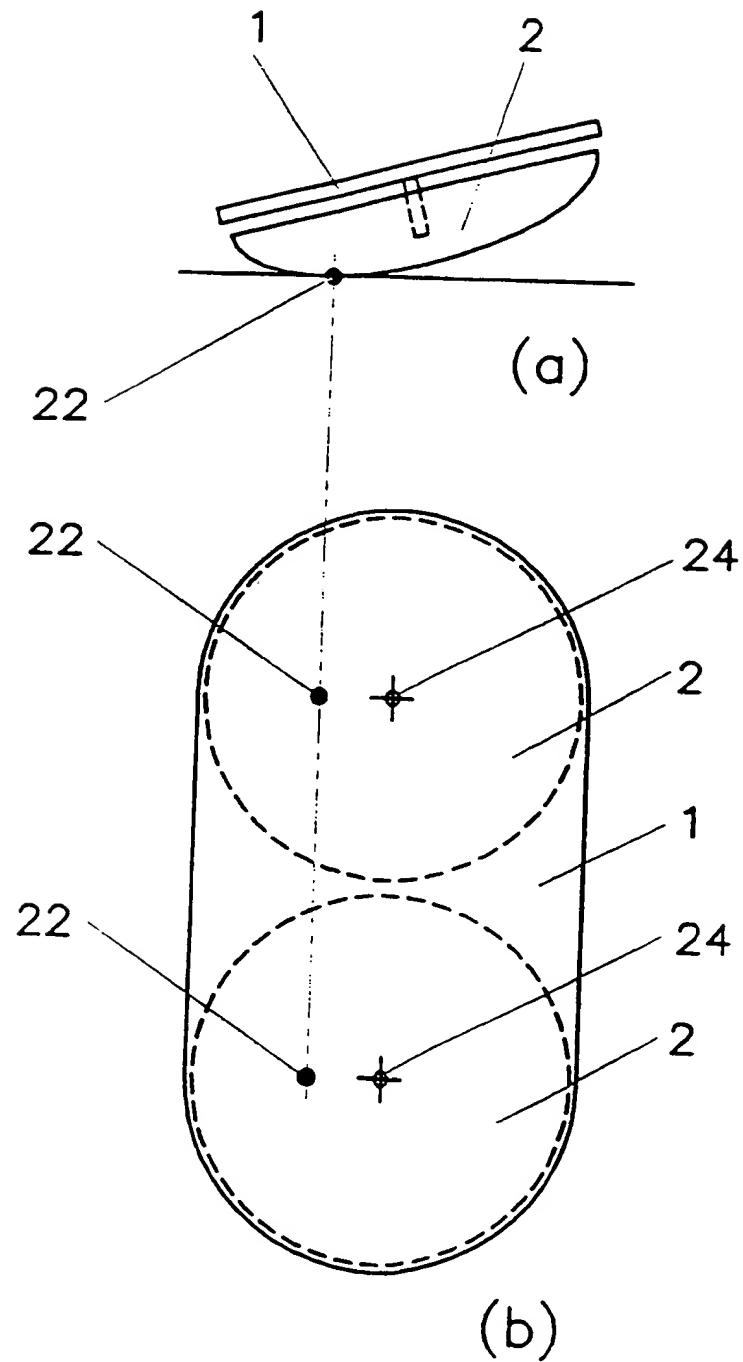
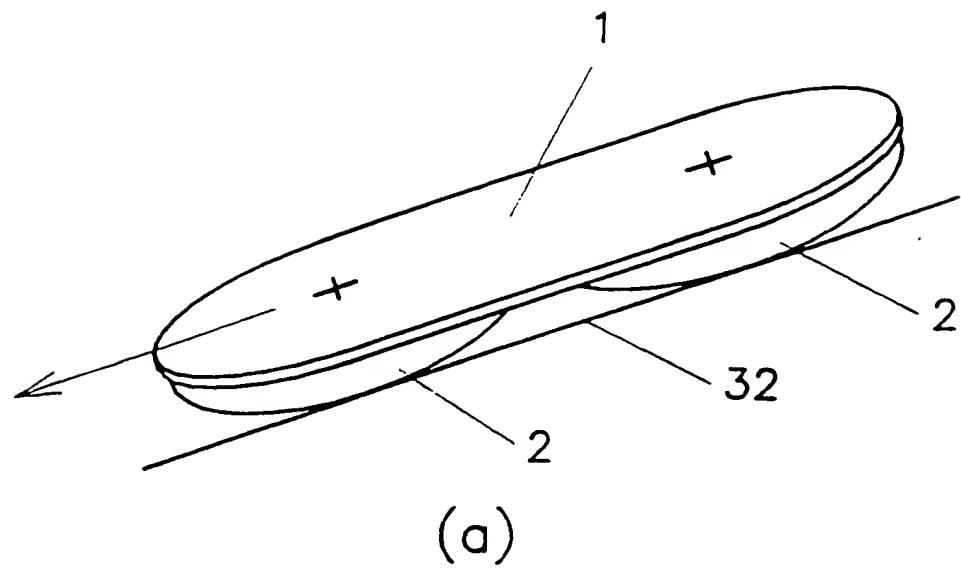
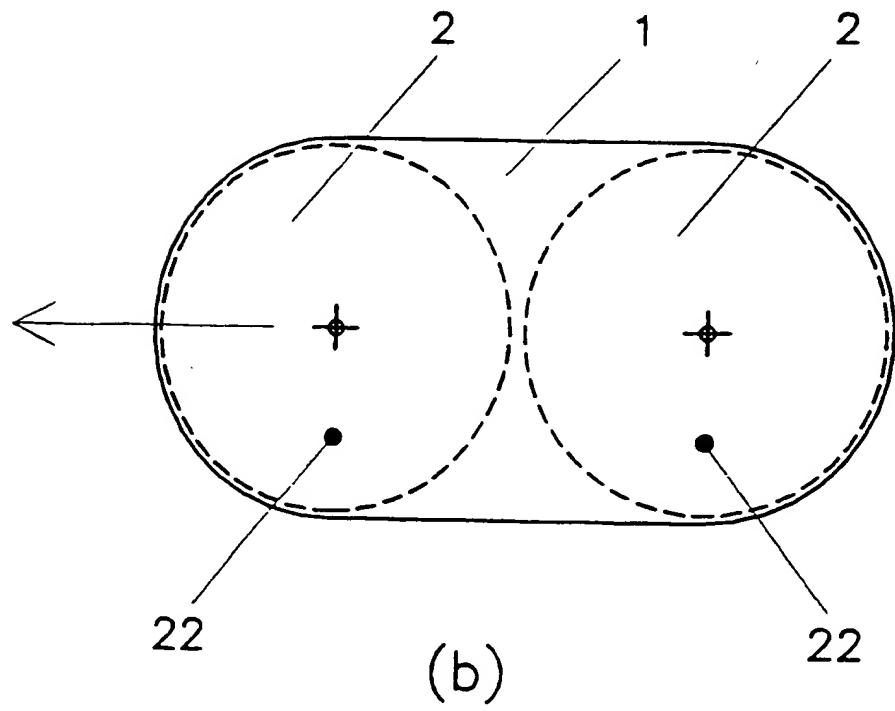


FIG.3

4/12



(a)



(b)

FIG.4

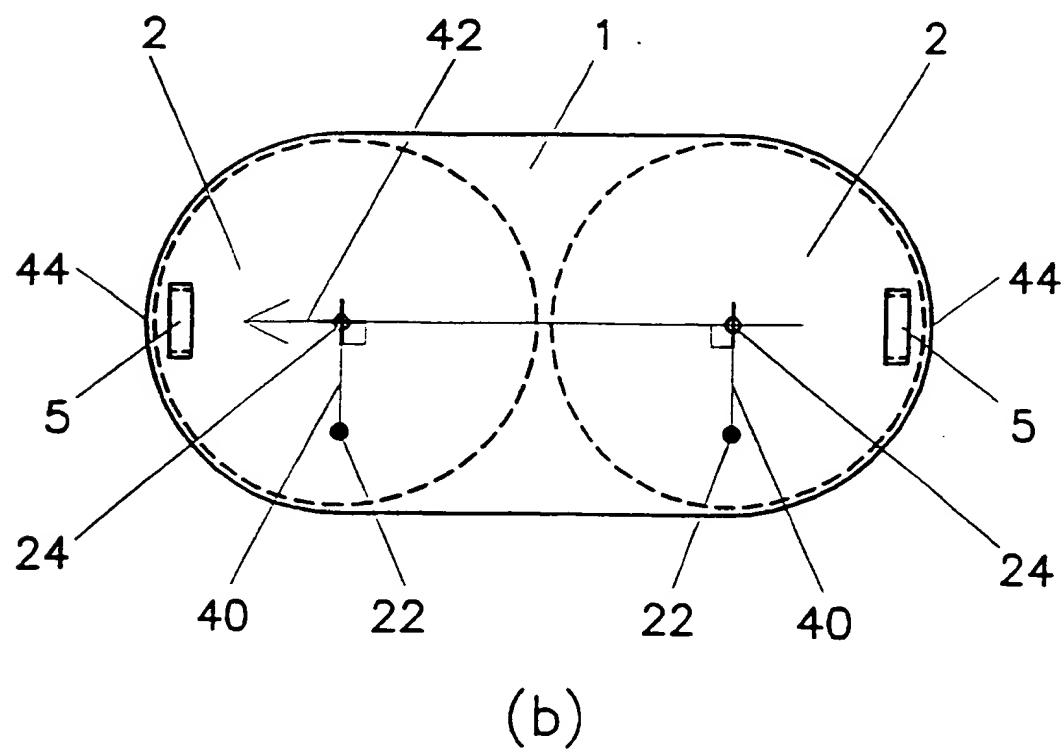
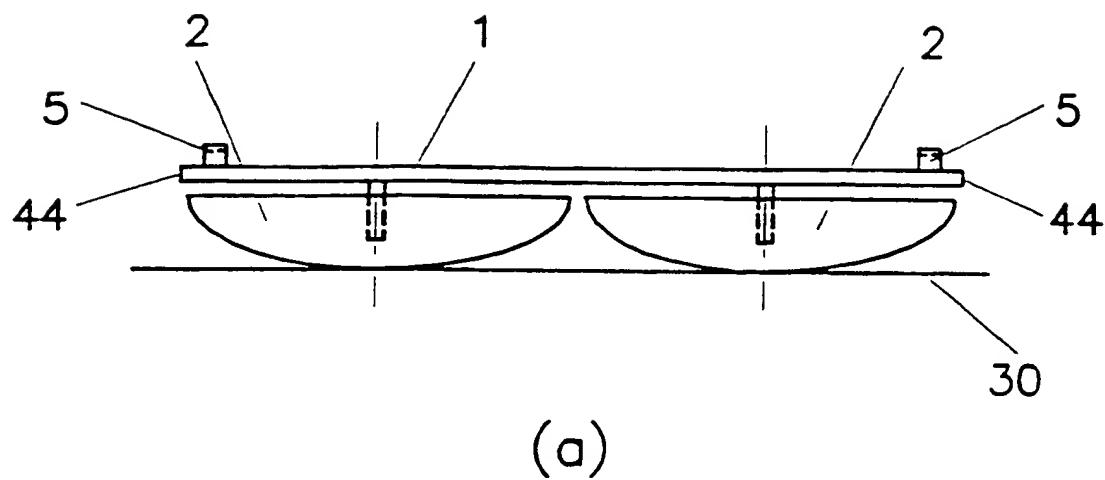


FIG.5

6/12

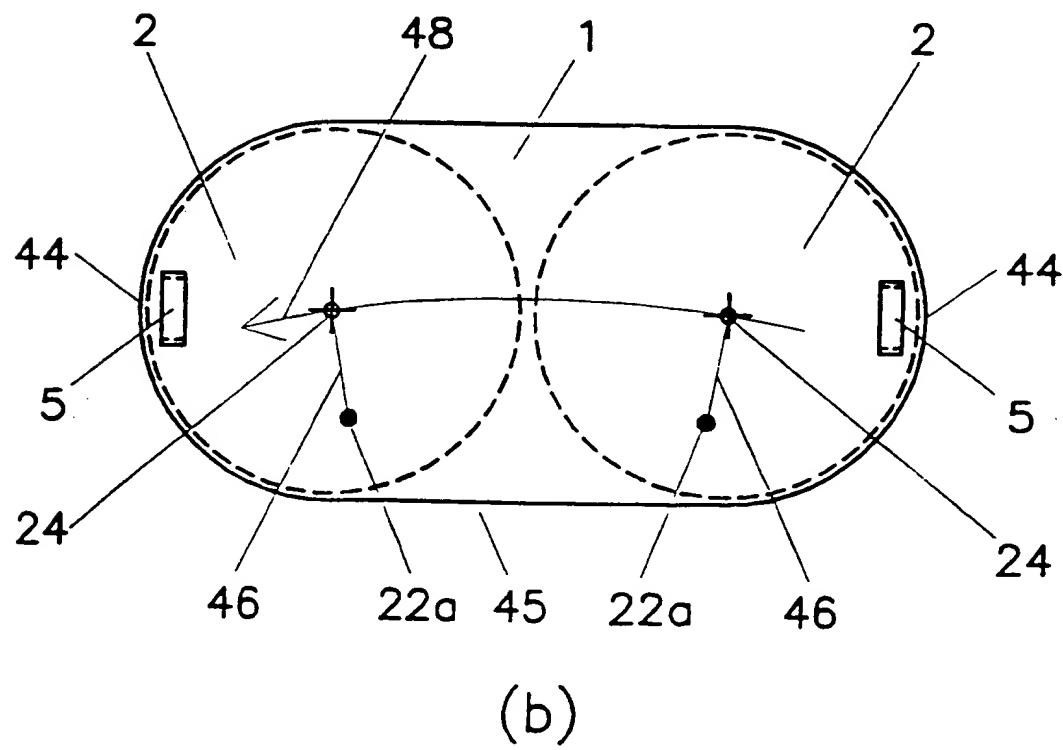
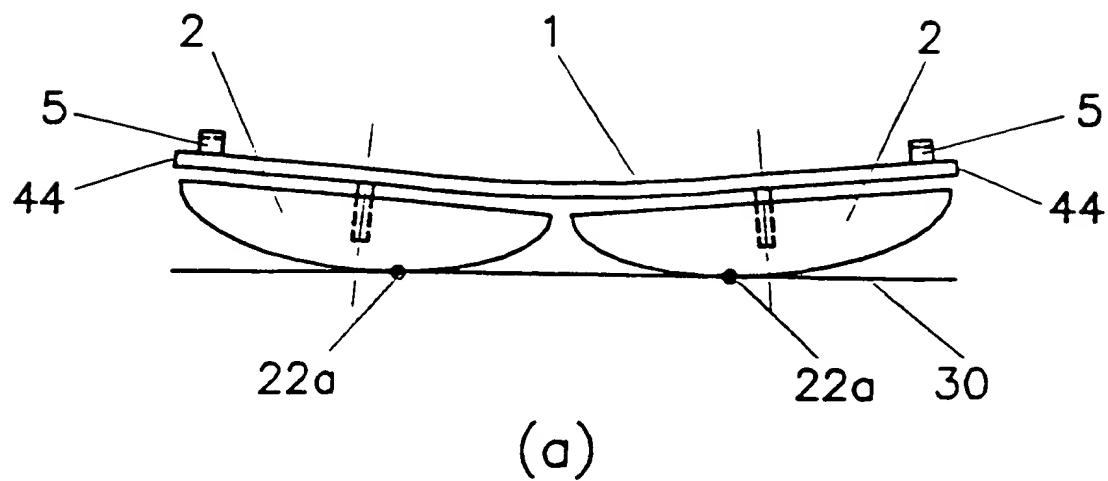


FIG.6

7/12

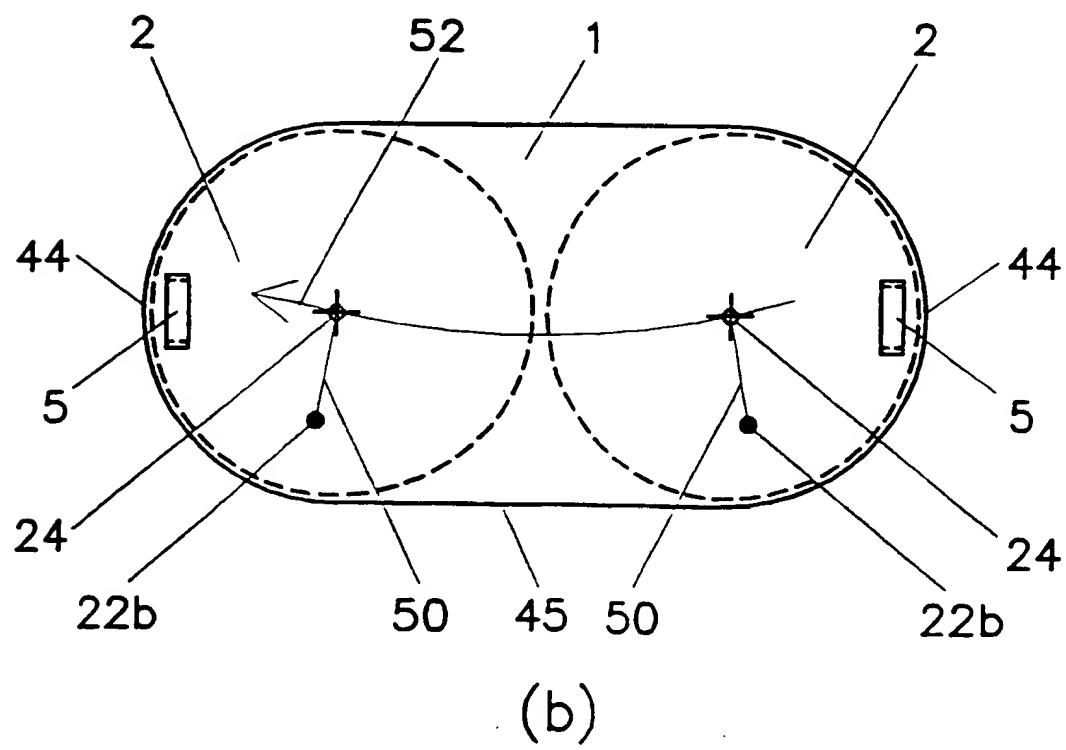
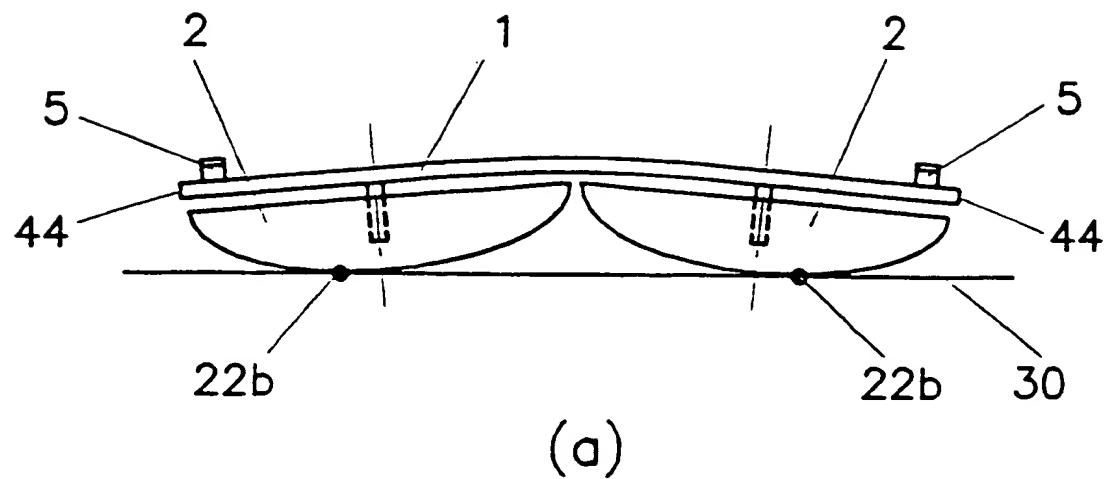


FIG.7

8/12

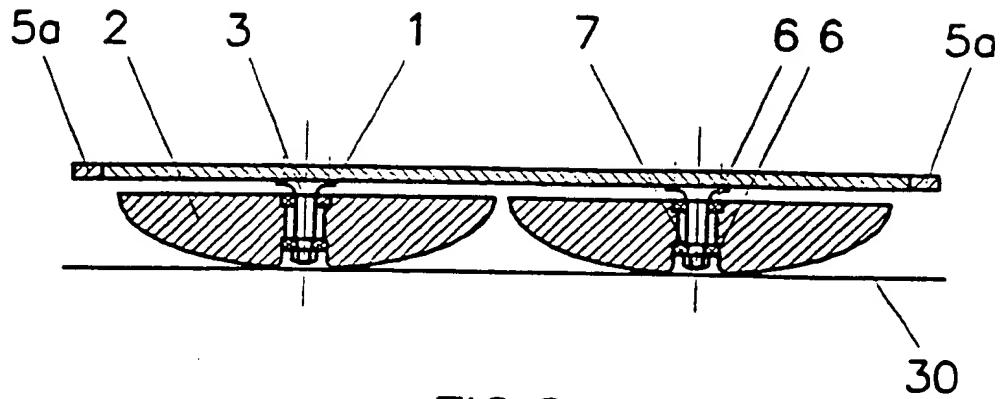


FIG.8a

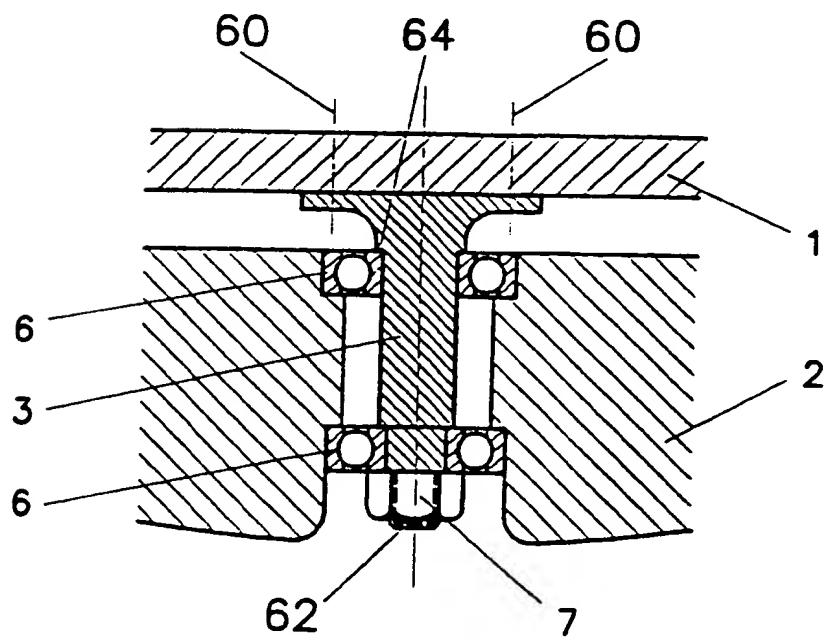


FIG.8b

9/12

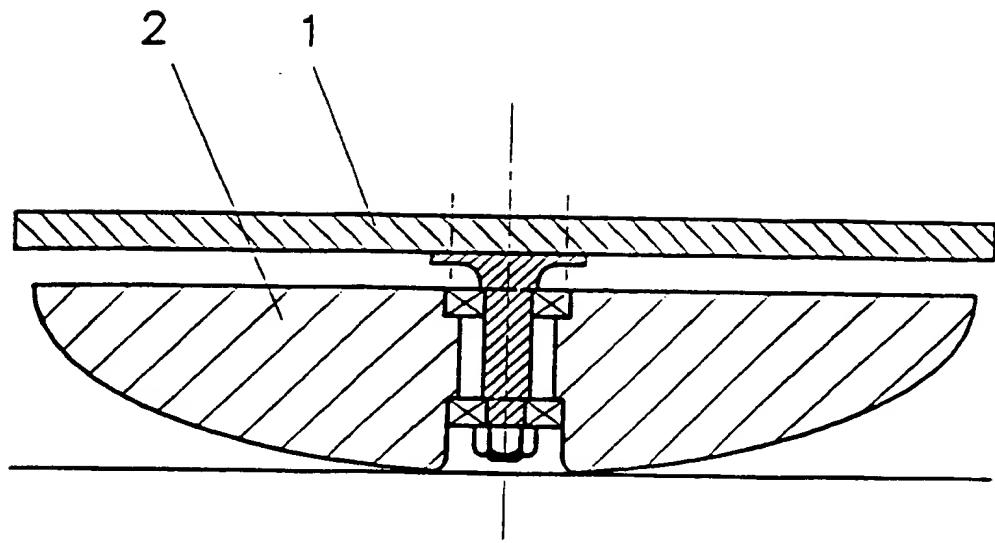


FIG.9

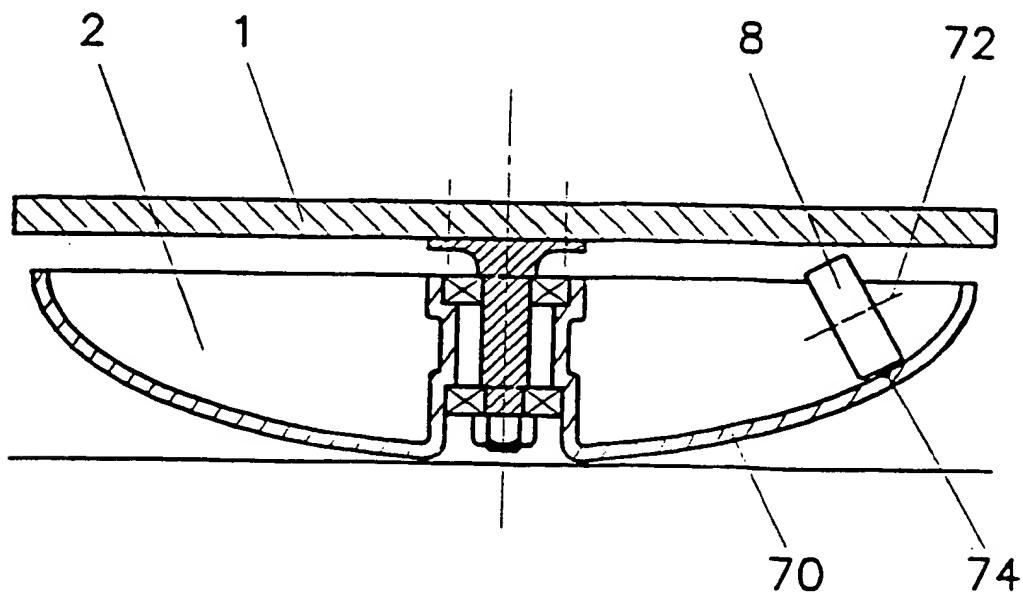


FIG.10

10/12

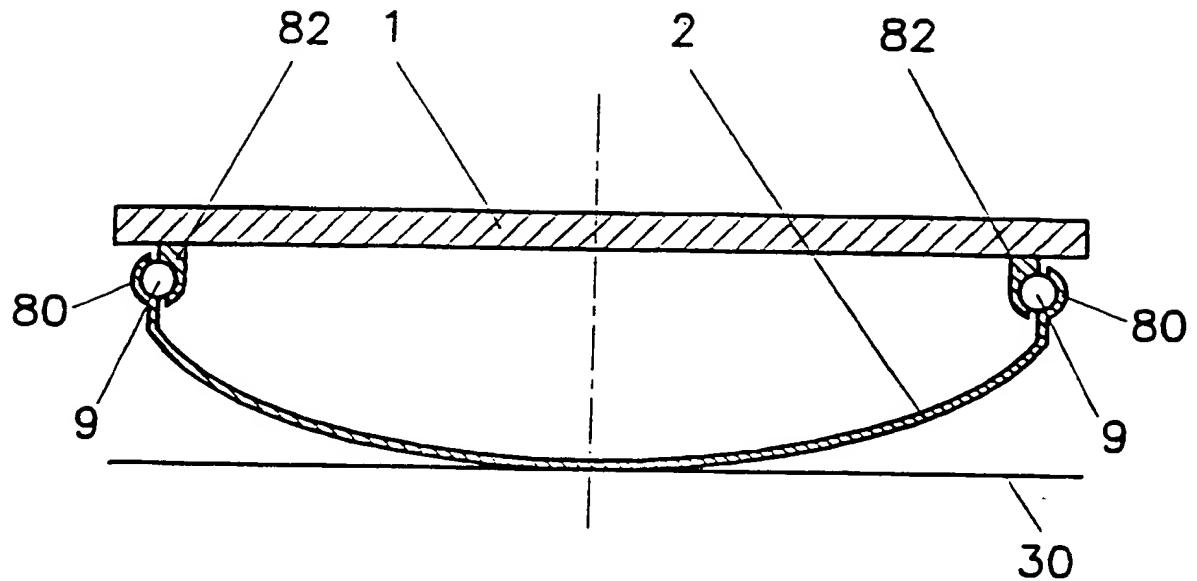


FIG.11

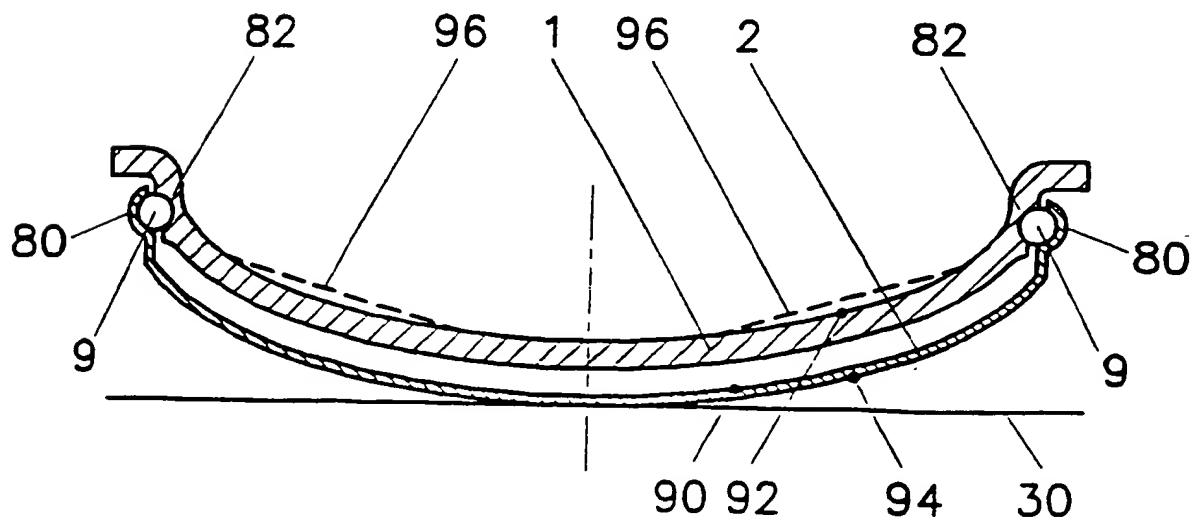


FIG.12

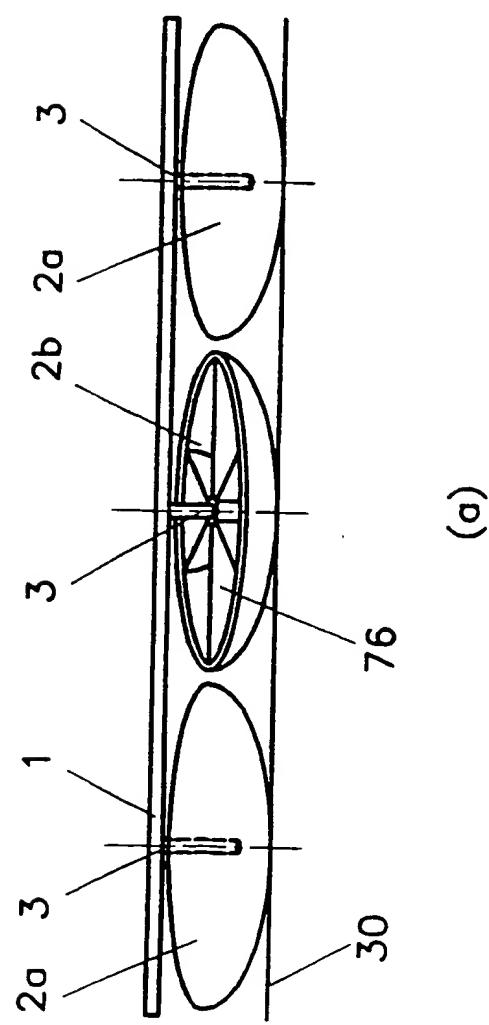
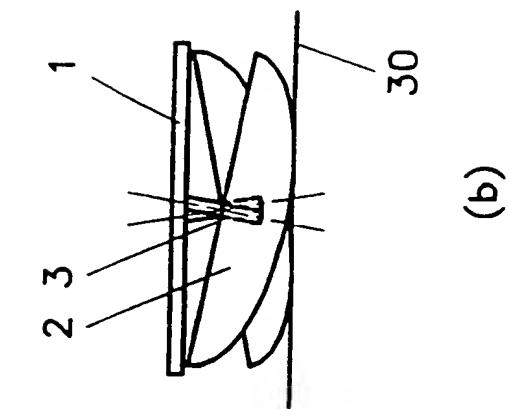


FIG.13

12/12

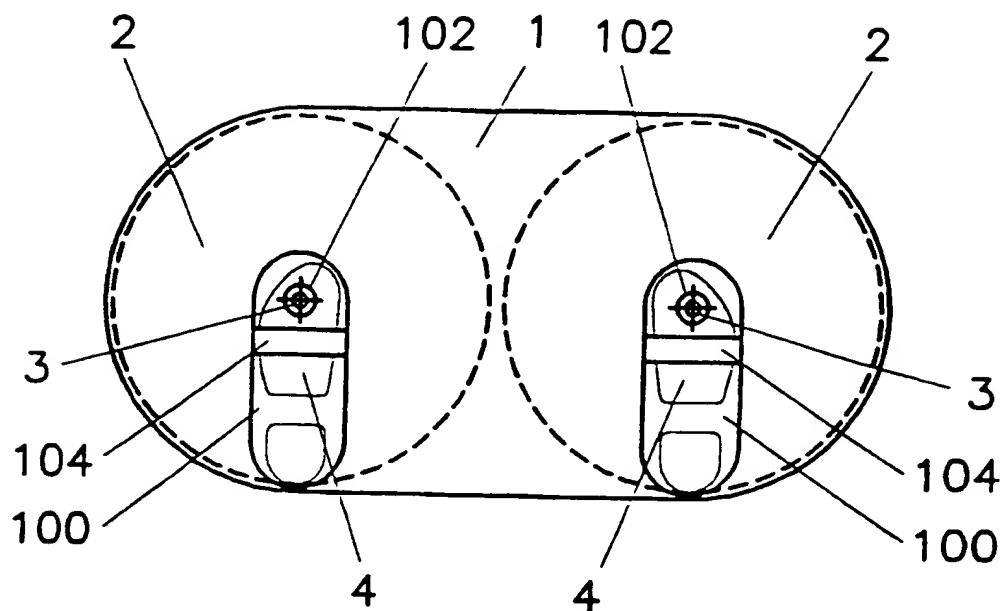


FIG.14

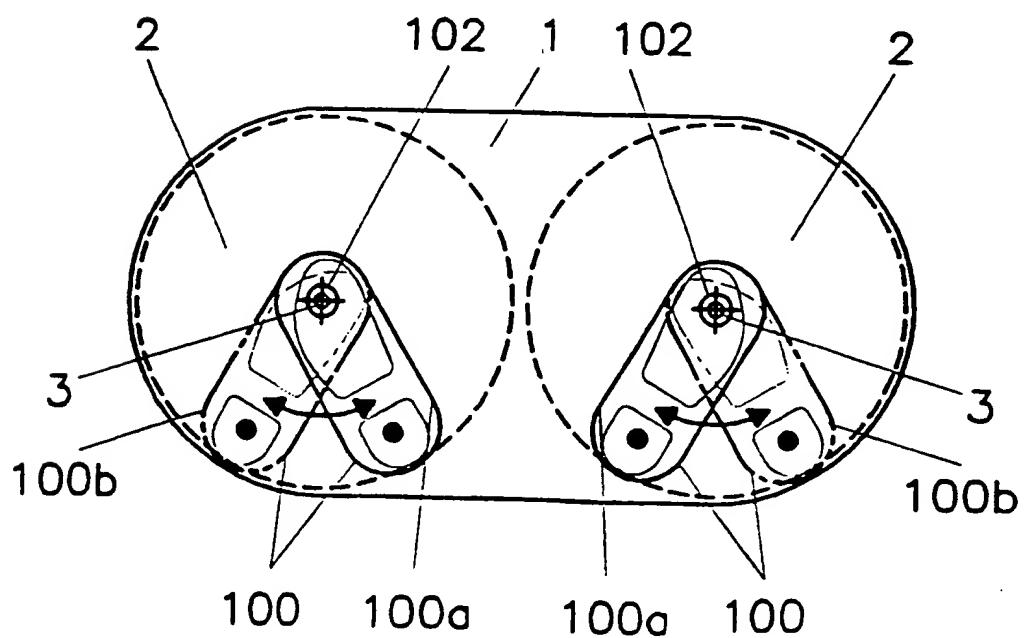


FIG.15

APPENDIX C

APPENDIX C

United States Patent and Trademark Office OG Notices: 05 February 2002

SPECIAL BOXES FOR PATENT MAIL

Special box designations should be used to allow forwarding of particular types of mail to the appropriate areas as quickly as possible. Such mail is forwarded to the appropriate area without being opened. Only the specified type of document should be placed in an envelope addressed to one of these special boxes. If any documents other than the specified type identified for each special box are addressed to that box, they will be significantly delayed in reaching the appropriate area for which they are intended.

Some correspondence may only be submitted via the Office's electronic filing system (EFS). For example, the following publication requests must be submitted via EFS:

- a request for publication of an application as amended during examination (37 CFR 1.215(c));
- a request for redacted publication (37 CFR 1.217(b));
- a request for voluntary publication of an application filed before November 29, 2000 (37 CFR 1.22(a)); or
- a request for republication of an application that has already been published (37 CFR 1.22(a)).

Instructions on how to file such an application request via EFS are located on the Office's Electronic Business Center on the Office's Internet Web site <http://www.uspto.gov> <<http://www.uspto.gov>>) under the Electronic Business Center section.

Please address mail to be delivered by the United States Postal Service (USPS) as follows:

Box
Commissioner for Patents
Washington, D.C. 20231

Please address mail to be delivered by other delivery services (Federal Express (Fed Ex), UPS, DHL, Laser, Action, Purolater, etc.) as follows:

U.S. Patent and Trademark Office
2011 South Clark Place
Customer Window, Box
Crystal Plaza Two, Lobby, Room 1B03
Arlington, Virginia 22202

Box Designations	Explanation
Box REISSUE	All new and continuing reissue application filings.
Box 12	Contributions to the Examiner Education Program.
Box 313(b)	Petitions under 37 CFR 1.313(c) to withdraw a patent application from issue after payment of the issue fee and any papers associated with the petition, including papers necessary for a continuing application or a request for continued examination (RCE).
Box AF	Expedited procedure for processing amendments and other responses after final rejection.
Box Comments Patents	Public comments regarding patent related regulations and procedures.
Box CPA	Requests for Continued Prosecution Applications (CPA's) under 37 CFR 1.53(d).
Box DAC	Petitions decided by the Office of Petitions including petitions to revive and

	petitions to accept late payment of issue fees or maintenance fees.
Box DD	Disclosure Documents or materials related to the Disclosure Document Program.
Box Design	The filing of all design patent applications which do not request expedited examination under 37 CFR 1.55.
Box Expedited Design	Only to be used for the initial filing of design applications accompanied by a request for expedited examination under 37 CFR 1.155. (Design applicants seeking expedited examination may alternatively file a design application and corresponding request under 37 CFR 1.155 by hand-delivering the application papers and request directly to the Design Group Director's office.)
Box Issue Fee	All communications following the receipt of a PTOL-85, "Notice of Allowance and Issue Fee Due," and prior to the issuance of a patent should be addressed to Box Issue Fee, unless advised to the contrary. Assignments are the exception. Assignments should be submitted in a separate envelope and not be sent to Box Issue Fee.
Box Missing Parts	Response to the Notice to File Missing Parts of Application and associated papers and fees.
Box MPEP	Submissions concerning the Manual of Patent Examining Procedures.
Box Non-Fee Amendment	Non-fee amendments to patent applications. (Use Box AF for responses after final rejection.)
Box PATENT APPLICATION	New patent applications and associated papers and fees.
Box Patent Ext.	Applications for patent term extension and any communications relating thereto.
Box PGPUB	Correspondence regarding publication of patent applications not otherwise provided.
Box PGPUB - ABD	Petitions under 37 CFR 1.138 to expressly abandon an application to avoid publication of the application.
Box PGPUB DRAWINGS	Drawings to be included in a patent application publication (replacement drawings for drawings included with a patent application on filing).
Box PCT	Mail related to applications filed under the Patent Cooperation Treaty.
Box Provisional Patent Application	The filing of all provisional patent applications and any communications relating thereto.
Box RCE	Requests for continued examination under 37 CFR 1.114.
Box Reconstruction	Correspondence pertaining to the reconstruction of lost patent files.
Box Reexam	Requests for Reexamination for original request papers only.
Box Sequence	Submission of diskette for biotechnical application.
Box SN	For fee and petitions under 37 CFR 1.182 to obtain date received and/or application number for patent applications prior to the Office's standard notification (return post card or the official "Filing Receipt," "Notice to File Missing Parts," or "Notice of Incomplete Application").

SPECIAL BOXES FOR TRADEMARK MAIL

Special box designations should be used to allow forwarding of particular types of trademark mail to the appropriate areas as quickly as possible. In addition to these box designations, filers are encouraged to indicate whether the contents of the envelope contain a fee. Envelopes containing a fee should be marked "FEE;" envelopes not containing a fee

APPENDIX D

APPENDIX IV

PTO/SB/18 (08-00)

Please type a plus sign (+) inside this box →

Approved for use through 10/31/2002. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**UTILITY
PATENT APPLICATION
TRANSMITTAL**

(Only for new nonprovisional applications under 37 CFR 1.53(b))

APPLICATION ELEMENTS

: MPEP chapter 600 concerning utility patent application contents.

- Fee Transmittal Form (e.g., PTO/SB/17)
(Submit an original, and a duplicate for fee processing)
- Applicant claims small entity status.
See 37 CFR 1.27
- 3. Specification [Total Pages 16]
(preferred arrangement set forth below, MPEP 1503.01)
 - Descriptive title of the invention
 - Cross Reference to Related Applications
 - Statement Regarding Fed sponsored R&D
 - Reference to sequence listing, a table, or a computer program listing appendix
 - Background of the Invention
 - Brief Summary of the Invention
 - Brief Description of the Drawings *(if filed)*
 - Detailed Description
 - Claim(s)
 - Abstract of the Disclosure
- 4. Drawings (37 U.S.C. 113) [Total Sheets 12]
- 5. Oath or Declaration [Total Pages 2]
 - a. Newly executed (original or copy)
 - b. Copy from a prior application (37 CFR 1.63(d))
(for continuation/divisional with Box 18 completed)
 - i. **DELETION OF INVENTOR(S)**
Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b)
- 6. Application Data Sheet. See 37 CFR 1.76

Attorney Docket No.	717901.16
First Named Inventor	PLENDERLEITH, William
Title	SPORTS VEHICLE
Express Mail Label No.	EJ445151987US

ADDRESS TO: Assistant Commissioner for Patents
Box Patent Application
Washington, DC 20231

- 7. CD-ROM or CD-R in duplicate, large table or Computer Program *(Appendix)*
- 8. Nucleotide and/or Amino Acid Sequence Submission *(if applicable, all necessary)*
 - a. Computer Readable Form (CRF)
 - b. Specification Sequence Listing on:
 - i. CD-ROM or CD-R (2 copies); or
 - ii. paper
 - c. Statements verifying identity of above copies

ACCOMPANYING APPLICATION PARTS

- 9. Assignment Papers (cover sheet & document(s))
- 10. 37 CFR 3.73(b) Statement Power of Attorney *(when there is an assignee)*
- 11. English Translation Document *(if applicable)*
- 12. Information Disclosure Statement (IDS)/PTO-1449 Copies of IDS Citations
- 13. Preliminary Amendment
- 14. Return Receipt Postcard (MPEP 503)
(Should be specifically itemized)
- 15. Certified Copy of Priority Document(s) *(if foreign priority is claimed)*
- 16. Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.
- 17. Other: Check for \$388.00

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

Continuation Divisional Continuation-in-part (CIP) of prior application No.: _____ / _____
 Prior application information: Examiner _____ Group Art Unit: _____

For CONTINUATION or DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

19. CORRESPONDENCE ADDRESS

Customer Number or Bar Code Label Insert Customer No. or Bar Code Here Insert Bar Code Here Correspondence address below

Name	Kevin M. Kercher 720 Olive Street 24 th Floor				
Address	St. Louis	State	Missouri	Zip Code	63101
City	United States	Telephone	314-345-6000	Fax	314-345-6060
Name (Print/Type)	Registration No. (Attorney/Agent) 33,408				
Signature			Date	November 20, 2001	
			11/20/01		

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

FEE TRANSMITTAL

for FY 2002

Patent fees are subject to annual revision.

TOTAL AMOUNT OF PAYMENT

(\$388.00)

Complete if Known

Application Number	Unknown
Filing Date	Herewith
First Named Inventor	PLENDERLEITH, William
Examiner Name	Not Yet Known
Group Art Unit	Not Yet Known
Attorney Docket No.	717901.16

METHOD OF PAYMENT (check one)

1. The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:

Deposit Account Number
11-0160

Deposit Account Name
BLACKWELL SANDERS PEPPER MARTIN LLP

Charge Any Additional Fee Required
Under 37 CFR §§ 1.16 and 1.17

Applicant claims small entity status.
See 37 CFR 1.27.

2. Payment Enclosed:

Check Credit card Money Other Order

FEE CALCULATION

1. BASIC FILING FEE

Large Entity Fee Code (\$)	Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
101 740	201 370		Utility filing fee	370
106 330	206 165		Design filing fee	
107 510	207 255		Plant filing fee	
108 740	208 370		Reissue filing fee	
114 160	214 80		Provisional filing fee	
SUBTOTAL (1)				(\$370.00)

2. EXTRA CLAIM FEES

Total Claims	22	-20** =	2	x	9	=	18	Fee from below	Fee Paid
Independent Claims	1	-3** =	0	x		=	0		

Multiple Dependent
** or number previously paid, if greater. For Reissues, see below

Large Entity Fee Code (\$)	Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	
103 18	203 9		Claims in excess of 20	
102 84	202 42		Independent claims in excess of 3	
104 280	204 140		Multiple dependent claim, if not paid	
109 84	209 42		** Reissue independent claims over original patent	
110 18	210 9		** Reissue claims in excess of 20 and over original patent	
SUBTOTAL 2				(\$18.00)

** or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES	Large Entity Fee Code (\$)	Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
105	130	205	65	Surcharge - last filing fee or oath	
127	50	227	25	Surcharge - late provisional filing fee or cover sheet	
139	130	139	130	Non-English specification	
147	2,520	147	2,520	For filing a request for <i>ex parte</i> reexamination	
112	920*	112	920*	Requesting publication of SIR prior to Examiner action	
113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action	
115	110	215	55	Extension for reply within first month	
116	400	216	200	Extension for reply within second month	
117	920	217	460	Extension for reply within third month	
118	1,440	218	720	Extension for reply within fourth month	
128	1,960	228	980	Extension for reply within fifth month	
119	320	219	160	Notice of Appeal	
120	320	220	160	Filing a brief in support of an appeal	
121	280	221	140	Request for oral hearing	
138	1,510	138	1,510	Petition to institute a public use proceeding	
140	110	240	55	Petition to revive - unavoidable	
141	1,280	241	640	Petition to revive - unintentional	
142	1,280	242	640	Utility issue fee (or reissue)	
143	460	243	230	Design issue fee	
144	620	244	310	Plant issue fee	
122	130	122	130	Petitions to the Commissioner	
123	50	123	50	Processing fee under 37 CFR 1.17(q)	
126	180	126	180	Submission of Information Disclosure Stmt	
581	40	581	40	Recording each patent assignment per property (times number of properties)	
146	740	246	370	Filing a submission after final rejection (37 CFR § 1.129(a))	
149	740	249	370	For each additional invention to be examined (37 CFR § 1.129(b))	
179	740	279	370	Request for Continued Examination (RCE)	
169	900	169	900	Request for expedited examination of a design application	
Other fee (specify) _____					
Other fee (specify) _____				SUBTOTAL (3)	0
*Reduced by Basic Filing Fee Paid				(\$388.00)	

** or number previously paid, if greater; For Reissues, see above

SUMMITTED BY

Complete (if applicable)

Name (Print/Type)	Kevin M. Kercher	Registration No. (Attorney/Agent)	33,408	Telephone	(314) 345-6000
Signature	<i>Kevin M. Kercher</i>	Date		November 20, 2001	

APPENDIX E

APPENDIX E

THE
NEW LEXICON
WEBSTER'S
DICTIONARY
OF THE ENGLISH LANGUAGE

◆ ◆ ◆

LEXICON PUBLICATIONS, INC.

NEW YORK

femalé it comprises the two ovaries, the Fallopian tubes, the uterus and the vagina.

re-prographics (rɪ:p्रəgræfɪks) *n.* the field of reproduction of documents, including input, editing, photocomposing, and reproduction; esp. for official use.

re-progra-phy (rɪprógræfɪ) *n.* document reproduction by electronic techniques, e.g., by photocopying —**reprographic adj.**

re-proof (rɪprūf) *n.* a reproving or an instance of this [O.F. *reprove*, *reprouve*]

re-prove (rɪprūv) *pres. part.* **re-prov-ing past** and **past part.** **re-proved v.t.** to rebuke (someone) [fr. O.F. *reprover*]

rep-tant (réptant) *adj.* (biol.) creeping or crawling [fr. L. *reptans* (*reptantis*)]

rep-tile (réptail, réptil) *1. n.* a member of *Reptilia*, a class of cold-blooded vertebrates incl. snakes, lizards, crocodiles and turtles etc. They have lungs, a heart with three chambers, and a skin covered with tough scales or plates. Some creep on their bellies, others crawl on very short legs *2. adj.* of, like or having the characteristics of a reptile **reptilian** (réptilien, *reptilién*) *adj.* and *n.* [fr. L.L. *reptilis*, creeping]

re-pub-lic (ripʌblɪk) *n.* a form of government in which the head of state is an elected president rather than a monarch || a form of government in which the sovereign power is widely vested in the people either directly or through elected representatives || a state with either of these forms of government || a society whose members are equally engaged in the same activity, *the republic of letters* [fr. F. *république* or L. *respublica* fr. *res*, affair + *publicus*, public]

re-pub-lic-an (ripʌblɪkan) *1. adj.* pertaining to, characteristic of or having the nature of, a republic || favoring a republic **Re-pub-lic-an** of or belonging to the Republican party *2. n.* a person who supports the form of government of a republic **Re-pub-lic-an** a member of the Republican party

Republican party one of the two main political parties of the U.S.A. (cf. DEMOCRATIC PARTY). It was formed (1854) by antislavery groups to oppose the Kansas-Nebraska Act, and attracted many Whigs, Free-Soilers and those Know-Nothings who opposed slavery. It rapidly gained power in the North and held its first national convention in 1856. Lincoln became the first Republican president (1861). The Republicans held the presidency from then until 1913, with the exception of the administrations (1885-9 and 1893-7) of Cleveland. They were weakened by the secession of the Liberal Republicans (1872) and the Mugwumps (1884). In the late 19th c. the Republican party favored protective tariffs and the gold standard. After the administrations of Theodore Roosevelt and Taft, the secession of the Progressive party split the Republicans (1912). They returned to power (1921-33) under Harding, Coolidge and Hoover, but were blamed for the economic crisis of 1929 and were out of office until the administration (1953-61) of Eisenhower. They lost (1961-9) the presidency, regaining it with the administration (1969-74) of Richard Nixon. Vice President Gerald Ford assumed the presidency following Nixon's resignation but lost the 1976 election to Democrat Jimmy Carter. The Republicans regained the presidency with Ronald Reagan's landslide victory in 1980, and they controlled the Senate for the first time since 1955. Democrats held control of the House through the 1984 elections, when Reagan was reelected

Republic of Ireland *IRISH REPUBLIC

re-pu-di-ate (ri:pju:dɪ'eɪt) *pres. part.* **re-pu-di-ating past** and **past part.** **re-pu-di-ated v.t.** to refuse to be concerned with or responsible for (someone) || to refuse to accept (something) as valid or true || to refuse to pay (e.g. a debt or claim) [fr. L. *repudiare* (*repudiatus*), to divorce]

re-pu-di-a-tion (ri:pju:dɪ'ēʃən) *n.* a repudiating or being repudiated [fr. L. *repudiatio* (*repudiationis*))

re-pug-nance (ri:pʌgnəns) *n.* extreme dislike, aversion [F. *répugnance* or fr. L. *repugnatio*] **re-pug-nant** (ri:pʌgnənt) *adj.* producing the feeling of repugnance [F. or fr. L. *repugnans* (*repugnans*))]

re-pulse (ri:pəls) *n.* a repulsing or being repulsed [fr. L. *repulsa* or *repulsus* fr. *repellere* (*repulsiō*), to drive back]

repulse *pres. part.* **re-pul-sing past** and **past part.** **re-puls-ed v.t.** to drive back by force || to refuse or reject, to repulse an offer of help || to fill

with repulsion [fr. L. *repellere* (*repulsiō*), to drive back]

re-pul-sion (ri:pəlʃən) *n.* a repulse || a feeling of repugnance || (phys.) the force tending to drive two bodies further apart [fr. L. L. *repulsio* (*repulsionis*))]

re-pul-sive (ri:pəlsvɪ) *adj.* causing feelings of repulsion || (phys.) tending to repel [REPULSE v.]

repu-nit (répjū:nit) *n.* (math.) a number consisting entirely of integers, 11, 111, etc., or 99, 999, etc.

re-pur-chase (ri:pɔ:rtʃəs) *pres. part.* **re-pur-chasing past** and **past part.** **re-purchas-ed 1. v.t.** to buy back 2. *n.* a repurchasing

repu-ta-bility (répjutə'biliti) *n.* the state or quality of being reputable

repu-ta-table (répjutə'bł) *adj.* having a good reputation || reliable, a **reputable source** **répu-ta-bly** *adv.* [fr. older *répute*, to consider fr. F. *réputér* or L. *reputare*]

repu-ta-tion (répjutə'ʃən) *n.* the general opinion held by people about the merits or demerits of a person or thing || the state or fact of being highly thought of or esteemed || the good name of a person or thing earned through merit and distinction || (usually with 'of') a specified manner, quality etc. generally ascribed to someone or something, *he has the reputation of being an excellent horseman* [fr. L. *reputatio* (*reputationis*)), consideration]

repute (ri:pjút) *1. n.* reputation, esp. good reputation, a writer of *repute* *2. v.t. pres. part.* **re-put-ing past** and **past part.** **re-puted** (esp. used passively) to consider, accord a certain character etc. to, *he is reputed to be rich* **re-púted** *adj.* held in high esteem || generally supposed, its reputed origin goes back to Roman times **re-pútedly** *adv.* by or according to reputation [fr. older *répute*, to consider fr. F. *réputér* or L. *reputare*]

request (rikwést) *n.* an act of requesting something or an instance of this || something requested || the fact or state of being requested, available on request by request because of or following a request or requests in request asked for by many persons, popular [O.F. *re-quête*]

request *v.t.* attempt to obtain (something) by making one's wants or desires known in speech or writing || to attempt to get (someone) to do or give something that one wants by making this known in speech or writing || to attempt in speech or writing to obtain permission (to do something) [fr. O.F. *requester*]

req-ui-em (rékwɪ:əm, rɪ:kwi:əm) *n.* a Mass for the repose of a deceased person || the musical setting of such a Mass [L. *accusative of requies*, rest (the first word of the introit of the Roman Catholic requiem)]

require (rikwáɪər) *pres. part.* **re-quir-ing past** and **past part.** **re-quired** *v.t.* to stipulate, the law requires that the report must be made annually || to place an obligation on (someone), the law requires you to report annually || to need, this requires careful consideration **re-qui-re-ment** *n.* something stipulated or demanded || something needed [O.F. *requerre* (*requer-, re-quier-*)]

req-ui-site (rékwizit) *1. adj.* required *2. n.* something required or necessary [fr. L. *requirere* (*requisitus*)]

req-ui-sition (rekwɪzɪʃən) *1. n.* a formal taking of control over goods or services under authority, esp. by an army in the field or by the State in a war or other catastrophe || the condition of being taken over for use in this way, to be on requisition || a written request or formal demand for goods or supplies under a centralized system of supply *2. v.t.* to take control of under authority, to requisition a house || to require (someone or something) to provide, householders were requisitioned to provide shelter for the victims || to request (goods, supplies etc.) under a centralized system of supply [F. *réquisition* or L. *requisitio* (*requisitionis*))]

re-quai-lit (ri:kwaɪ'lɪt) *n.* a requiring or being required || something given in return for services or retaliation

re-quite (ri:kwaɪt) *pres. part.* **re-quiting past** and **past part.** **re-quited v.t.** to repay (someone) for a benefit, injury etc. || to give (something) in return for a benefit, injury etc., to requite good for evil [fr. RE- + *quite*, var. of QUIT]

re-ra-di-a-tion (ri:rédɪ'ēʃən) *n.* (communications) unwanted radio signals in a receiving instrument

re-ra-di-a-tive (ri:rédɪ:tɪv) *adj.* having the ability to reflect radiation

re-reno (rífədos) *n.* an ornamental screen behind an altar [A.F. fr. *rere*, back + *dos*, back]

re-run *1. (ri:rán) v. pres. part.* **re-run-ning past** *re-ran* (ri:rán) *past part.* **re-run v.t.** to run (esp. a race, movie or television show) again *2. (ri:rán) n.* a replayed T.V. show || the public showing of a movie after withdrawing it from circulation for a time, or the movie itself **Re-sa-ca de la Pal-ma** (resákodélpálma), a valley of the Rio Grande in Texas, site of the second battle (1846) of the Mexican War. Mexican troops under Gen. Mariano Arista, retreating south after the battle of Palo Alto, were defeated by U.S. forces under Gen. Zachary Taylor

re-sale (ri:séil, ri:séil) *n.* a selling again or an instance of this

re-scind (risfnd) *v.t.* to cancel (a previous decision, regulation etc.) **re-scind-a-ble** *adj.* [fr. L. *rescindere*]

re-scis-sion (risfʒən) *n.* the act of rescinding [fr. L. *rescissio* (*rescissionis*)]

re-scis-sory (risfʒəri:, risfʒəri:) *adj.* rescinding [fr. L. *rescisorius*]

re-script (ri:skript) *n. (hist.)* a written reply by a Roman emperor or a pope to a question of jurisprudence || any official order or announcement by a ruler or government || a rewriting || something rewritten [fr. L. *rescribere* (*scriptus*), to rewrite, to write back]

re-scue (réskju:) *1. pres. part.* **re-scu-ing past** and **past part.** **re-scu-ed v.t.** to deliver from danger, harm, evil, violence, imprisonment etc. or the threat of any of these || (law) to free from legal custody by force *2. n.* the act of rescuing || (law) release by force from legal custody [O.F. *rescure*]

re-search (risfɔ:rtʃ) *v.i.* to engage in research [fr. obs. F. *rechercher*]

research (risfɔ:rtʃ, ri:sɔ:rtʃ) *n.* a systematic search for facts || scientific investigation [fr. obs. F. *recherche*]

re-seat (ri:sít) *v.t.* to seat (oneself, a person) again || (mech.) to refit in its setting, to **re-seat a valve** || to provide (a chair) with a new seat

re-sect (risék) *v.t. (surg.)* to remove a portion of (an organ etc.) [fr. L. *resecare* (*resectus*), to cut off]

re-se-e-da (risf:də) *n.* a member of *Reseda*, fam. *Resedaceae*, a genus of plants including *mignonette*, chiefly native to the Mediterranean region, having cleft petals and numerous stamens in their racemose flowers || (also *rézida*) the greenish-yellow color of some *mignonette* flowers [fr. L. *resedare*, to assuage (fr. the use of the plants as a charm for curing tumors)]

re-seg-reg-a-tion (ri:segri:géjən) *n.* to segregate after having desegregated

re-sem-blance (rízembles) *n.* the state, fact or quality of resembling, similarity

re-sem-ble (rízemb'l) *pres. part.* **re-sem-bl-ing past** and **past part.** **re-sem-bled** *v.t.* to be similar to, have the same appearance or nature as [fr. O.F. *resembler*]

re-sent (rizént) *v.t.* to take strong exception to (what is thought to be unjust, interfering, insulting, critical etc.) **re-sent-ful** *adj.* **ré-sen-tment** *n.* [fr. F. *ressentir*, to feel the result of]

re-ser-va-tion (rézərvéjən) *n.* a reserving || something that is reserved || a limitation or qualification, **mental reservation** || (eccles.) the practice of keeping in the sanctuary a portion of the consecrated Host || (eccles.) the keeping back of the right of granting absolution in certain cases || the engaging in advance of a hotel room, theater seat etc. || a record of such an engaging, a tract of land set aside for some special use [O.F.]

reserve (rizé:rv) *n.* something set aside for future use || limitation, reservation or qualification, to accept a statement with reserve [an instance of this || avoidance of familiarity in social relationships || self-restraint in action or speech || (in religious instruction and casuistry) suppression of a part of the truth || (mil., usually pl.) troops temporarily withheld from action so that they may be available for special use || (mil.) the trained men of a country not in active service, but subject to call in case of war or emergency || one of these men || (finance) profit added to capital rather than being paid out to shareholders || (banking) assets kept available as cash || (central banks) assets held as gold or foreign exchange || a reservation (tract of land) in reserve put aside for future use without

APPENDIX F

THE
NEW LEXICON
WEBSTER'S
DICTIONARY
OF THE ENGLISH LANGUAGE

◆ ◆ ◆

LEXICON PUBLICATIONS, INC.

NEW YORK

with an offensive smell 2. *n.* a strong, foul smell to make (or raise or cause) a stink to cause trouble, esp. in public over something offensive or supposedly offensive [O.E. *stincan*]

stink bomb a small bomb which emits an evil smell when made to explode

stink-bug (*stinkbag*) *n.* any of several insects, esp. of fam. *Pentatomidae*, which emit a foul smell

stink-horn (*stinkhorn*) *n.* any of several foul-smelling fungi of the order *Phallales*

stinking (*stinkin*) 1. *adj.* foul-smelling (pop.) very objectionable 2. *adv.* (pop.) to an extreme degree, *stinking rich*

stink-pot (*stinkpot*) *n.* (*hist.*) a pot of burning sulfur hurled on the deck of an enemy vessel

stint (*stint*) 1. *v.t.* to be parsimonious with (something), *don't stint the paint* || to limit (someone) parsimoniously or with frugality, *they stint themselves to buy books* || *v.i.* to be sparing in giving 2. *n.* limitation, *he gives without stint* || an allotment or period of work, *he has done his stint for today, he did his stint in the army* [O.E. *styntan*, to blunt]

stipe (*staip*) *n.* (*biol.*) a short stalk, stem or stemlike support, e.g. the stem-bearing pileus in agaric fungi, the stalk of seaweeds etc. [F.]

stipel (*stáipl*) *n.* (*bot.*) the stipule of a leaflet [Mod. L. *stipella* dim. of *stipula*, a stalk]

sti-pend (*stáipend*) *n.* a fixed, usually moderate sum of money paid, e.g. to a clergyman, at regular intervals for services rendered [O.F. *stipende*, *stipendie* fr. L.]

sti-pen-dary magistrate (*staipéndári*): (*Br.*) a paid magistrate who is a qualified lawyer and who exercises duties similar to those of a justice of the peace

sti-pen-diary (*staipéndi:eri*): 1. *adj.* working for, or receiving, a stipend || (of services) paid for by a stipend 2. *pl.* **sti-pen-diaries** *n.* (*Br.*) a stipendary magistrate [fr. L. *stipendiarius*]

sti-pes (*stáipi:z*) *pl.* **sti-pi-tes** (*stipiti:z*) *n.* (*zool.*) a stemlike part, esp. the second segment of a maxilla in insects and crustaceans [L.]

sti-pile (*stípli*) 1. *v.t. pres. part.* **sti-pil-ing past** and **past part.** **sti-pil-ed** to cover with dots (in drawing, engraving, painting etc.) in order to shade or make gradations of tone 2. *n.* this method of work || the effect produced in this work || the effect produced in this work || a thin layer of paint applied over another color, allowing the ground color to show through in many places [Du. *stippelen* fr. *stippen*, to speckle]

sti-pu-late (*stipjuleit*) *pres. part.* **sti-pu-lat-ing past** and **past part.** **sti-pu-lated** *v.t.* to state as a condition for reaching an agreement || to specify, *to stipulate a date* || *v.i.* (with 'for') to state a demand or requirement, *we stipulated for the use of marble* [fr. L. *stipulari* (*stipulatus*)]

sti-pu-late (*stipjulit*) *adj.* having stipules [fr. Mod. L. *stipulatus*]

sti-pu-lation (*stipjulé:son*) *n.* a stipulating || something stipulated [L. *stipulatio* (*stipulationis*)]

sti-pu-lator (*stipjuleitär*) *n.* someone who stipulates [L.]

sti-pule (*stípu:l*) *n.* one of two leaflike or membranous processes developed at the base of a leaf, sometimes modified into a tendril or spine [F.]

stir (*star*) 1. *v. pres. part.* **stir-ring past** and **past part.** **stirred** *v.t.* to give relative motion to the parts of (a fluid or semifluid), usually by moving an implement through it with a continued rotary motion in order to make the composition homogeneous || to cause (something added) to form a uniform mixture with that to which it is added, *to stir pigment into paint* || (esp. with 'up') to cause to rise by stirring or as if by stirring, *his dive stirred up some mud, to stir up trouble* || to cause to move, esp. to change the position of very slightly, *the breeze stirred the leaves* || to cause to act, feel or think, *the news stirred him to action, to stir the imagination* || to arouse strong emotions of an idealistic kind in || *v.i.* to begin to move, *nobody stirred before daybreak* || to move a little, *he stirred slightly in his sleep* || to move, *he did not stir while you were gone* || to be able to be stirred, *the glaze does not stir easily* || to begin to develop, *discontent is stirring among the farmers* 2. *n.* the act of stirring || a slight movement among things, persons etc., a *stir in the audience* || a state of excitement, *he created a stir by his behavior* [O.E. *styrian*]

Stirling (*stó:rlin*) a county (area 451 sq. miles, pop. 195,000) in central Scotland || its county town (pop. 38,638), with a medieval castle, res-

idence of many Scottish monarchs (12th c.-1603)

stir-ring (*stó:rin*) *adj.* arousing strong emotions of an idealistic kind

stirrup (*stírp*, *stó:rep*) *n.* a footrest for a horseman, usually a loop of iron, suspended by a strap from the saddle || a clamp or support having a similar U-shape [O.E. *stigráp*]

stirrup bone the staples

stirrup cup a drink handed as a farewell gesture to a mounted horseman before he rides away

stirrup iron the iron part of a riding stirrup

stirrup leather the adjustable leather strap of a stirrup

stirrup pump a small hand pump with a stirrup support and a short hose attached. The pump is placed e.g. in a bucket of water and is used to put out small fires

stish-o-vite [*SiO₂*] (*stíshvait*) a dense polymorph of quartz created under pressure believed of extraterrestrial origin; named for S. M. Stishov, Russian mineralogist. It was discovered by Edward Ching Te-Cha and others in 1962

stitch (*stítj*) 1. *n.* one in-and-out passage of a thread through a fabric in sewing or embroidering || the piece or loop of thread left in the material by this action || one turn of the wool etc. around the needle or hook in knitting, crocheting etc. || the resulting loop in the knitted or crocheted fabric || a particular style of making such loops in sewing, embroidering, knitting or crocheting || (pop., always neg., or quasi-neg.) a bit, the least bit, *he hasn't done a stitch of work, hardly a stitch of clothing on* || one in-and-out passage of a needle threaded with catgut, wire etc. used by a surgeon in closing a wound || one of the loops of catgut, wire etc. so made || a sudden sharp pain in the side in stitches in helpless laughter 2. *v.t.* (often with 'up') to fasten, repair, make or ornament with stitches || to staple (folded printed sheets) for binding || *v.i.* to sew [O.E. *stice*]

sto-a (*stóu*) *pl.* **sto-ae** (*stóui:*), **sto-as** *n.* (*archit.*) an ancient Greek portico [Gk.]

stoat (*stout*) *pl.* **stoats**, **stoat** *n.* the European ermine, esp. in its brown, summer coat [etym. doubtful]

sto-chastic (*stakéstik*) *adj.* pertaining to chance or conjecture || (*math.*) random [fr. Gk *stochastikos* fr. *stochazesthai*, to aim at a target, guess]

sto-chastic process (*math.*) in probability theory a system involving time parameters used to define a process utilizing random variables, e.g., of the economy, ecosystem, etc. also random process

stock (*stok*) 1. *n.* an accumulation of things which is maintained as a constant source of supply, esp. as the basis of a storekeeper's or manufacturer's business || an accumulation of goods for future use, a stock of provisions || ancestors, family || a group of animals or plants having the same line of descent || a major racial division of mankind || a group of related languages || shares of corporate capital or their certificates of ownership || the material necessary for running an enterprise, e.g. the tractors, tools, hen houses etc. of a farm || livestock || the raw material from which a manufactured article, e.g. paper, is made || the fixed base or holding part of a tool, weapon, anchor etc. || the wooden part of a rifle by which the barrel is held || the butt of a whip || the estimation in which a thing or person is held, *his stock has gone up* || (*pl.*, *naut.*) a wooden framework supporting the hull of a ship being built or repaired on land || (*pl.*, *hist.*) a wooden frame with holes for confining the ankles (and sometimes the wrists) of a wrongdoer sentenced to be exposed in this way to public view and ridicule || liquid in which bones, meat, fish or vegetables have been simmered, used as a basis for soups, sauces etc. || a theatrical stock company || the plays presented by a stock company || a piece of cotton or silk material worn over the chest with a stiff white collar by some priests and clergymen || (*hist.*) a wide cravat wrapped twice around the neck and looped in front in a loose knot || a similar cravat worn as part of a riding outfit || a member of *Matthiola*, fam. *Cruciferae*, a genus of plants bearing fragrant, four-petaled flowers on long stalks [zool.] a colony of zooids connected to form a compound organism || a hive of bees || the stem of a tree or bush into which a graft is inserted || a plant from which cuttings are prepared || the trunk of a tree or stem of a plant in stock manufactured and available for

purchase off the stocks (of a ship) launched || completed on the stocks (of a ship) being built || in progress, *he has two novels on the stocks out of stock* not available for purchase because current stocks are exhausted to take stock to check the number, condition etc. of what is in supply || to make an inspection so as to assess resources etc. 2. *v.t.* to furnish with a supply, *he stocked his shop with canned foods* || to have and be able to supply, *he does not stock that kind of food* || to furnish (a tool, weapon etc.) with a stock || to furnish (a farm) with stock || to accumulate a supply of || *v.i.* (esp. with 'up') to take in stocks esp. of manufactured goods 3. *adj.* always maintained in stock || pertaining to the recording or handling of a stock, *stock clerk* || (of an argument, answer etc.) usually used, not original || relating to a theatrical stock company || (of an animal) used to breed a strain || (of a farm) devoted to breeding [O.E. *stoc*, *stocc*]

stock-ade (*stokéid*) 1. *n.* a fortification consisting of a fence of posts set firmly and close together || any strong enclosure fenced in by posts in this way 2. *v.t. pres. part.* **stock-ad-ing past** and **past part.** **stock-ad-ed** to furnish with a stockade [F. *estacade* fr. Span.]

stock-brok-er (*stókbrouker*) *n.* someone who deals in stocks and shares **stock-brok-er-age** (*stókbroukeridz*) *n.* stockbroking **stock-brok-ing** *n.* the business of a stockbroker

stock-car (*stókkar*) *n.* (*rail.*) a car for transporting livestock

stock-car a standard make of car with a supercharged engine used for racing in competition with similar cars

stock company a company the capital of which is subscribed by, or owned by, stockholders or shareholders || a permanent company of repertory actors usually having its own theater

stock exchange a place where stocks are bought and sold || a regulated association of stockbrokers for the business of buying and selling stocks

stock-fish (*stókfí*) *pl.* **stock-fish**, **stock-fish-es** *n.* a fish cured in the open air without salt [prob. fr. Du. *stokvisch*]

Stock-hau-sen (*stókhauz'n*), Karlheinz (1928-), German composer, a leading exponent of serial music

stock-hold-er (*stókhóldér*) *n.* a person who owns stock (shares of corporate capital)

Stock-holm (*stókhólm*) the capital (pop. 1,512,200 with agglom. 1,145,000) and commercial and industrial center of Sweden, on a cluster of islands and peninsulas where Lake Mälaren joins the Baltic. Industries: iron and steel, mechanical and electrical engineering, chemicals, oil refining, metalwork, textiles, printing and publishing. The old city (13th-c. churches, 18th-c. royal palace) is on the central islands, surrounded by modern quarters cut by canals and gardens. University (1877), national museums. Stockholm was founded in the 13th c. and became the capital in the 17th c.

stocky (*stókili*) *adv.* in a stocky manner

stock-i-ness (*stóki:nis*) *n.* the state or quality of being stocky

stock-i-net, **stock-i-nette** (*stókiné:t*) *n.* a machine-knitted cotton fabric with some elasticity, used esp. for underwear

stock-ing (*stókip*) *n.* a close-fitting covering for the foot and leg knit in nylon, silk, wool, cotton or other fiber

stocking feet wearing stockings, but no shoes

stocking cap a long knitted cap tapering at the end and finished off with a pom-pom

stocking mask a nylon stocking worn over the face to conceal identity, e.g., for use in a robbery

stock-in-trade (*stókintréid*) *n.* the goods, equipment etc. of a shop or business

stock-ist (*stókist*) *n.* (*Br.*) someone who keeps a supply of specified goods for sale

stock-job-ber (*stókdzbár*) *n.* a stockbroker, esp. an unscrupulous one || (*Br.*) someone who acts as an intermediary between a broker selling and a broker buying. He often speculates by buying on the rise

stock-man (*stókmán*) *pl.* **stock-men** (*stókmén*) *n.* a man who owns or raises livestock || (*stókmén*) a man who keeps records of stock or gives out supplies, e.g. in a warehouse || (*Br.* and *Austral.*) someone who herds livestock, esp. sheep or cattle

stock market a stock exchange || the buying and selling of stocks and shares

stock-pile (*stókpál*) *1. n.* a reserve, esp. of essential material accumulated for use when the

APPENDIX G

APPENDIX G

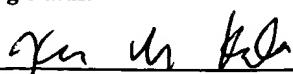
37 CFR 1.76

US.03 FORM FOR ENTERING THE NATIONAL PHASE. The USPTO has available a special form for the transmittal of the fees and documents required for entering the national phase (see Annex US.II). This form should preferably (but need not) be used, however, see paragraph US.05, below. Together with the special form indicated above, applicants may also submit an "application data sheet" containing bibliographic data. The submission of an application data sheet is voluntary. The "application data sheet" facilitates electronic capture of the bibliographic data by the USPTO, thus leading to more accurate data recording and quicker processing by eliminating the need to have this data manually extracted from the application papers. A guide to preparing an application data sheet, along with the necessary software for preparing the application data sheet, can be found at the USPTO's website www.uspto.gov by clicking on "Patents" then in the "Applications" column, clicking on "PrintEFS."

APPENDIX H

APPENDIX H

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE (REV. 12-2001)		ATTORNEY'S DOCKET NUMBER 717901.16
TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371		U.S. APPLICATION NO. (If known, see 37 CFR 1.5 09/989,351
INTERNATIONAL APPLICATION NO. PCT/GB00/01926	INTERNATIONAL FILING DATE May 22, 2000	PRIORITY DATE CLAIMED May 22, 1999
TITLE OF INVENTION SPORTS VEHICLE		
APPLICANT(S) FOR DO/EO/US William Plenzerleith		
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:		
<p>1. <input checked="" type="checkbox"/> This is a FIRST submission of items concerning a filing under 35 U.S.C. 371.</p> <p>2. <input type="checkbox"/> This is a SECOND or SUBSEQUENT submission of items concerning a filing under 35 U.S.C. 371.</p> <p>3. <input type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.</p> <p>4. <input type="checkbox"/> The US has been elected by the expiration of 19 months from the priority date (Article 31).</p> <p>5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2))</p> <ul style="list-style-type: none"> a. <input type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau). b. <input checked="" type="checkbox"/> has been communicated by the International Bureau. c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US). <p>6. <input type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).</p> <ul style="list-style-type: none"> a. <input type="checkbox"/> is attached hereto. b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4). <p>7. <input checked="" type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))</p> <ul style="list-style-type: none"> a. <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau). b. <input checked="" type="checkbox"/> have been communicated by the International Bureau. c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired. d. <input type="checkbox"/> have not been made and will not be made. <p>8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).</p> <p>9. <input checked="" type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).</p> <p>10. <input type="checkbox"/> An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).</p>		
<p>Items 11 to 20 below concern document(s) or information included:</p> <p>11. <input type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98.</p> <p>12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.</p> <p>13. <input type="checkbox"/> A FIRST preliminary amendment.</p> <p>14. <input type="checkbox"/> A SECOND or SUBSEQUENT preliminary amendment.</p> <p>15. <input type="checkbox"/> A substitute specification.</p> <p>16. <input type="checkbox"/> A change of power of attorney and/or address letter.</p> <p>17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 35 U.S.C. 1.821 - 1.825.</p> <p>18. <input type="checkbox"/> A second copy of the published international application under 35 U.S.C. 154(d)(4).</p> <p>19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).</p> <p>20. <input type="checkbox"/> Other items or information:</p>		

U.S. APPLICATION NO. (if known, see 37 CFR 1.5)	INTERNATIONAL APPLICATION NO.	ATTORNEY'S DOCKET NUMBER																																																																			
<p><input checked="" type="checkbox"/> The following fees are submitted:</p> <p>BASIC NATIONAL FEE (37 CFR 1.492 (a) (1) - (5)):</p> <p>Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO \$1040.00</p> <p>International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO \$890.00</p> <p>International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO \$740.00</p> <p>International preliminary examination fee (37 CFR 1.482) paid to USPTO but all claims did not satisfy provisions of PCT Article 33(1)-(4) \$710.00</p> <p>International preliminary examination fee (37 CFR 1.482) paid to USPTO and all claims satisfied provisions of PCT Article 33(1)-(4) \$100.00</p> <p>ENTER APPROPRIATE BASIC FEE AMOUNT =</p>		CALCULATIONS PTO USE ONLY																																																																			
<p>Surcharge of \$130.00 for furnishing the oath or declaration later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(e)).</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>CLAIMS</th> <th>NUMBER FILED</th> <th>NUMBER EXTRA</th> <th>RATE</th> <th>\$</th> </tr> </thead> <tbody> <tr> <td>Total claims</td> <td>22 - 20 =</td> <td>2</td> <td>x \$18.00</td> <td>\$ 36.00</td> </tr> <tr> <td>Independent claims</td> <td>1 - 3 =</td> <td>0</td> <td>x \$84.00</td> <td>\$</td> </tr> <tr> <td>MULTIPLE DEPENDENT CLAIM(S) (if applicable)</td> <td></td> <td></td> <td>+ \$280.00</td> <td>\$</td> </tr> <tr> <td colspan="4">TOTAL OF ABOVE CALCULATIONS =</td> <td>\$ 926.00</td> </tr> <tr> <td colspan="4"><input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.</td> <td>+ \$ 463.00</td> </tr> <tr> <td colspan="4">SUBTOTAL =</td> <td>\$ 463.00</td> </tr> <tr> <td colspan="4">Processing fee of \$130.00 for furnishing the English translation later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(f)).</td> <td>\$</td> </tr> <tr> <td colspan="4">TOTAL NATIONAL FEE =</td> <td>\$ 463.00</td> </tr> <tr> <td colspan="4">Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property +</td> <td>\$</td> </tr> <tr> <td colspan="4">TOTAL FEES ENCLOSED =</td> <td>\$ 463.00</td> </tr> <tr> <td colspan="4"></td> <td style="text-align: center;">Amount to be refunded:</td> <td>\$</td> </tr> <tr> <td colspan="4"></td> <td style="text-align: center;">charged:</td> <td>\$</td> </tr> </tbody> </table>		CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE	\$	Total claims	22 - 20 =	2	x \$18.00	\$ 36.00	Independent claims	1 - 3 =	0	x \$84.00	\$	MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ \$280.00	\$	TOTAL OF ABOVE CALCULATIONS =				\$ 926.00	<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.				+ \$ 463.00	SUBTOTAL =				\$ 463.00	Processing fee of \$130.00 for furnishing the English translation later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(f)).				\$	TOTAL NATIONAL FEE =				\$ 463.00	Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property +				\$	TOTAL FEES ENCLOSED =				\$ 463.00					Amount to be refunded:	\$					charged:	\$	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE	\$																																																																	
Total claims	22 - 20 =	2	x \$18.00	\$ 36.00																																																																	
Independent claims	1 - 3 =	0	x \$84.00	\$																																																																	
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ \$280.00	\$																																																																	
TOTAL OF ABOVE CALCULATIONS =				\$ 926.00																																																																	
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.				+ \$ 463.00																																																																	
SUBTOTAL =				\$ 463.00																																																																	
Processing fee of \$130.00 for furnishing the English translation later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(f)).				\$																																																																	
TOTAL NATIONAL FEE =				\$ 463.00																																																																	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property +				\$																																																																	
TOTAL FEES ENCLOSED =				\$ 463.00																																																																	
				Amount to be refunded:	\$																																																																
				charged:	\$																																																																
<p>a. <input type="checkbox"/> A check in the amount of \$ _____ to cover the above fees is enclosed.</p> <p style="text-align: center;">11-0160</p> <p>b. <input checked="" type="checkbox"/> Please charge my Deposit Account No. _____ in the amount of \$ 463.00 to cover the above fees. A duplicate copy of this sheet is enclosed.</p> <p>c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. <u>11-0160</u>. A duplicate copy of this sheet is enclosed.</p> <p>d. <input type="checkbox"/> Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.</p>																																																																					
<p>NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137 (a) or (b)) must be filed and granted to restore the application to pending status.</p> <p>SEND ALL CORRESPONDENCE TO:</p> <p>Blackwell Sanders Peper Martin, LLP 720 Olive Street, 24th Floor St. Louis, MO 63101</p>																																																																					
 Kevin M. Kercher <hr/>																																																																					
<hr/> <hr/> <hr/> <hr/>																																																																					